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Vol. 36, No. 4  
**APRIL**  
**1968**

**30c**

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# "AMATEUR RADIO"

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## W.I.A. OFFICIAL BROADCASTS

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# REGION III. CONGRESS

Easter 1968 and the Federal Convention in Sydney will have more than the usual significance for the Wireless Institute of Australia for, by the time this is read, final preparations will have been made to receive visitors from the National Amateur Societies of Japan, Philippines, New Zealand and U.S.A.

Sydney and the New South Wales Division will be hosts for the inaugural meeting of the Region III. I.A.R.U. Congress which was initiated by Federal Executive following discussions by Federal Council at Hobart last year.

In many respects this meeting can be likened to the initial meeting of what became the I.A.R.U. nearly 45 years ago when nine nations met in Paris to discuss the formation of an international association of Amateurs. Although techniques have changed, the original concepts are still as true today as in 1924—"the affecting of co-operative agreements between the National Amateur Radio Societies of the world on matters of common welfare; the advancement of the radio art; and the representation of two-way Amateur Radio communication interests in international communication conferences."

However, with the formation of the I.A.R.U. accomplished, national societies in other parts of the world have found that mutual co-operation and unified action within their own Regions can lead to a better understanding and possible solution of the problems facing the Amateur Service—convention in Region I., i.e. Europe-Africa, and in Region II., i.e. the Americas, have become, in recent years, regular affairs with the status of Amateur Radio being the better for these meetings.

Region III.—our part of the world—is unique. We are isolated from our neighbours by history and geography; we are part of a Region with a small Amateur population, yet it is significant that three national societies are sending two delegates to this, the inaugural meeting of Region III. It is unfortunate that other societies have not been able to be with us, but we understand their problems.

What then are the reasons for this spate of activity and what does this Congress hope to achieve? The reasons for the activity have been clearly stated in detail in earlier issues of this journal, but let us refresh your memory.

At the next international conference, the Amateur Radio Service, like all other users of the radio frequency spectrum, may be required to rejustify its frequency allocations. Whilst the Service has been well supported by some countries who recognise the benefits derived, this support can be expected to continue only so long as the Service compares favourably with other contenders for frequency space.

The Amateur Service has not received unqualified support from all countries, many of them claiming that other radio services are of greater importance and that allocations to the Amateur Service should be reduced or discontinued. This problem is of particular concern to new

and developing countries which find that few frequencies are available to them for their varied communication needs.

It is, therefore, vitally important that all administrations briefing delegates for an international conference have a sound understanding of the values of the services they are asked to support.

## FEDERAL COMMENT

The basic, immediate, and ultimate aim of this Congress, and indeed the preoccupation of any Regional Congress, is to promote, establish and maintain continuing Amateur activity in all countries so that the recognition of Amateur technological and sociological contributions are justification for continued existence.

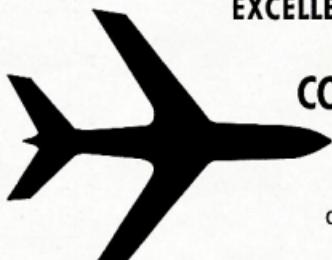
How this can be done will be the immediate concern of the delegates in Sydney at this Congress, but it can be expected that discussion will include matters of finance, establishment of technical and educational assistance, and other details vital in the implementation of such a far reaching and important goal.

For our part, we see no alternative to a plan for continuing support to our neighbouring Amateur Societies. It is a plan that does not come cheaply and is made more urgent by the belief that some I.T.U. conferences dealing with frequency allocations will be on a Regional basis.

If a Region III. I.T.U. conference was held now, the fate of presently held Amateur assignments in this Region could well be in jeopardy because Amateur oriented administrations would be in the minority—the threat to our allocations could well be within our own Region!

We have established an I.T.U. fund to send an observer to any I.T.U. conference dealing with Amateur affairs, but this is not enough. With the formation of a Regional association this Easter we must continue our personal contacts, and in the same way that Japan, New Zealand and the Philippines were able to send delegates to Australia, we too, must continue the work started. We must be prepared to finance and send W.I.A. representatives to future gatherings held elsewhere in this Region, and at the same time finance and implement Region III. assistance programmes.

PETER D. WILLIAMS. VK3IZ.  
Asst. Federal Sec., W.I.A.



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# SINGLE LOOP TRIBAND CUBICAL QUAD ELEMENT

## Triband Aerial Principle and Some Applications

H. F. RUCKERT,\* VK2AOU

WITH the present sunspot cycle near its peak, DX is again possible on 20, 15 and 10 metres. About fifteen years ago only those few Amateurs could successfully work DX who had plenty of real estate for an antenna farm or had enough engineering ability and cash to build a tower with three yagi beams in Christmas tree fashion stacked on top of each other.

With the last sunspot maximum a number of economy style triband aerials were invented, known by the call sign of the designers: W3DZZ, DL1FK, G4ZU, various versions of these aerials and the one the writer described, which is called VK2AOU beam in Europe. All these beams were described by the proud owners of large full size aerials as "compromise", but we are now convinced that some are a very good compromise, and top DXCC results have been achieved with them. In the meantime about 70% of all successful DX contacts are being made with these shortened beams.

The cubical quad has in recent years joined the list of excellent DX aerials, but its popularity is only limited by engineering problems involved to put up and rotate such a monster spider web. A mini-quad would in many cases be the answer, especially if three-band resonance could be had with one wire loop per element.

Experience has shown that an effective aerial is more important than transmitter power (within resonable limits). Not only the measured or calculated aerial gain is important. This figure would not explain sufficiently the DX results obtainable with a beam compared with a ground plane or di-

pole. The beam brings less noise, less QRM and, if high enough, places the radiation in the right direction to obtain maximum reflected power from the ionosphere.

Knowing that the successful DXer needs some sort of beam, the problem amounts in most cases to finding a reasonable compromise between DX ability of the aerial on the one side and weight and size reduction on the other side. We like to live in peace with the XYL, the neighbours and the local council. That means our aerial must not be considered as dangerous or as an eye sore and it must not hang over the fence of our 50 x 150 ft. block half of which is already covered by buildings. With these limitations in mind, to which we have to add cost and difficulties of erecting the supporting structure and the rotor, most of us will not be in the position to put up a full size 20 metre beam (yagi) or a cubical quad. A compromise, economy style or mini aerial is therefore in most cases the only way out.

The following description of a Triband Aerial Principle may be of particular interest because it can be applied to wire dipoles, ground planes, yagi beams and cubical quad aerials. The writer developed the principle about ten years ago. It was published in a number of magazines (see References) and in the antenna book by DM2ABK.

For the benefit of those who were not with Amateur Radio ten years ago, the principle and its development will be briefly repeated, and the second part describes aerials which were developed in recent years by DJ2UT and the writer. Early critics have been satisfied by now that this aerial works. VK2AU

won 1st place for N.S.W. phone section 1957 VK-ZL Contest. VK2AOU won 1st place for Australia, phone section, in the W.A.E.D.C. Contest in 1958. DL8NU made DXCC with 20 watts with the VK2AOU beam, and DL3GY worked 255 countries in 1966 with this beam.

About one hundred of these aerials are being used in central Europe, most of which were built by DJ2UT.† These aerials were two and three element yagis with the special triband tuning sections in the element centres using a single co-ax feed line. A number of ground plane aerials using this tuning method are also in use, and cubical quads will follow soon.

Interesting features are that these aerials do not respond to harmonics, they have only the desired resonances. They are only shortened at the lowest operating frequency, full size or more at the medium frequency and much longer at the highest frequency. They have no heavy blocking tuned circuits near the element ends. These are the main differences comparing this design with the now popular W3DZZ aerial, which are also shortened at the medium frequency, and which respond to undesired frequencies.

### THE MULTIBAND TUNING PRINCIPLE

Fig. 1

Dipole features:

Wavelength:  $\lambda$ .

Fundamental resonance freq.:  $f_n$ .

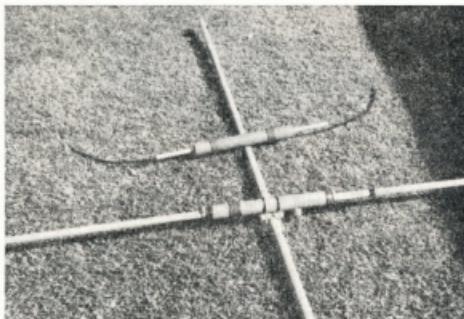
Dipole length:  $\lambda/2$ .

$f_n$  (Mc.) =  $300 \div \lambda$  (m).

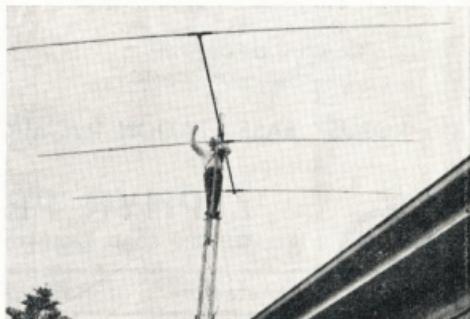
The dipole has the usually unwanted harmonic resonances at  $3f_n$ ,  $5f_n$ , etc.

† Walfrid Sommer. 7009 Denzlingen, Kandel Str. 35, Germany.

\* 25 Berrile Rd., Beverly Hills, N.S.W., 2209.



Radiator element mounted to boom of VK2AOU's three element triband beam. Note the coil tuning rings. Director tuning section lies behind, not yet mounted. Tuning section from DJ2UT. The cable type tuning capacitors of the director tuning section can be seen.



Beam 30 feet up on not yet cranked up steel mast. Junior op. on mast.



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XL681/A3	+ 75 Kc. to	150 Kc. \$19.80
XL682	+ 150 Kc. to	525 Kc. \$14.00
XL692	500 Kc. to	1 Mc. \$20.41
XL688/A1	+ 1 Mc. to	6 Mc. \$12.50
XL688/A2	+ 6 Mc. to	20 Mc. \$10.50
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XL691	+ 60 Mc. to	100 Mc. \$12.00
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Impedance: 50 ohms, 50K ohms

Frequency Range: 80 to 12 Kc.

Output: —55 db. (0 db. = 1V./dyne Cm<sup>2</sup>)

Switch: D.P.D.T. P. to T.

Housing: Angle adjustable



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**Fig. 2**

Dipole electrically lengthened with loading coil—  
 $f_r < f_n$ .

**Fig. 3**

Dipole electrically shortened with capacitor at centre—  
 $f_n > f_r$ .

Both these loaded dipoles have also odd harmonic resonances.

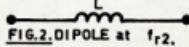
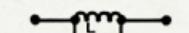
**Fig. 4**

The series tuned circuit behaves similar to the dipole, but only the fundamental resonance is found, as can be shown with a grid dip meter (g.d.o.).

**Fig. 5**

The parallel tuned circuit has only the fundamental resonance.  $f_r$  is in both cases:

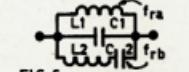
$$f_r = \frac{1}{2 \pi \sqrt{L \times C}}$$

**FIG. 1. DIPOLE at  $f_{r1}$ .****FIG. 2. DIPOLE at  $f_{r2}$ .****FIG. 3. DIPOLE at  $f_{r3}$ .****FIG. 5.**

### TWO-FREQUENCY TUNED CIRCUIT (Multiband Tank)

**Fig. 6**

The parallel combination of a series and parallel tuned circuit has been popular in transmitters, because with suitable components a frequency range of 3 to 30 Mc. could be tuned without changing the coils. This circuit shows always two simultaneous resonances,  $f_r$ , and  $f_n$ , which are not necessarily harmonically related to each other.

**FIG. 6.****FIG. 7.****Fig. 7**

**Two-band Aerial:** The dipole replaces the series tuned circuit shown at Fig. 6. L1 and C1 may have any suitable form. C1 may be a piece of cable of the required capacity, but it is not necessary to tune this cable to a particular frequency (G4ZU claim, switching stub). The resonance frequency  $f_r$  of L1 and C1 is usually somewhere between the

operating band frequencies (with the dipole element halves disconnected).

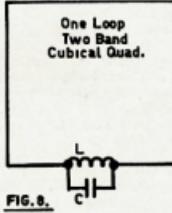
The two-band dipole may have different forms:

- (a) A dipole of wire or tubing.
- (b) A ground plane radiator and radials.
- (c) Any yagi beam element, and any number of these.
- (d) A loop of a cubical quad aerial element, any number of these.

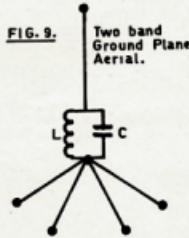
These combinations have always two resonances simultaneously, and can be tuned to work on two bands. The full dipole length is effective on both bands. No unwanted or harmonic resonances occur (3rd, 5th, etc.). L1 may be a closed stub or loop or coil. C1 may be a piece of cable, an adjustable or fixed capacitor.

**Fig. 8**

The one-loop two-band cubical quad element may be tuned for the required radiator, reflector or director frequencies.

**FIG. 8.****Fig. 9**

Also in the case of the two-band ground plane aerial, L can be adjusted to tune the lower operating frequency, whilst C is more effective to tune the higher frequency.



### THE TWO FORMS OF THREE-FREQUENCY TUNED CIRCUITS

**Figs. 10 and 11**

Three simultaneous resonances,  $f_r$ ,  $f_n$ , and  $f_{rb}$ , occur for any  $L1-C1$ ,  $L2-C2$  and  $L3-C3$  value combination. The Type-A and Type-B versions give similar results. The three resonances are not necessarily harmonically related nor do they have to be evenly spaced. All resonances may fall within a frequency ratio  $\Delta f$  of less than 1:2 or over 1:3.

### TRIBAND AERIALS

The series tuned circuit  $L3-C3$  of the Type-A or Type-B circuit can be replaced by any dipole form, like a simple

dipole, the yagi beam element halves, a single loop of a cubical quad, and the radiator and radials of a ground plane aerial. The dipoles are connected to point I and II of the tuning section.

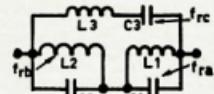
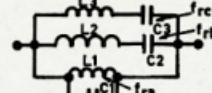
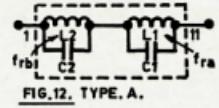
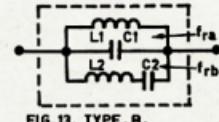
**Figs. 12 and 13**

### Typical conditions:

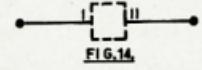
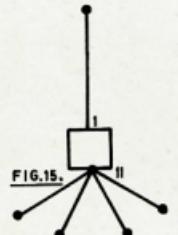
f..: Between high f-band and medium f-band (without dipole).

f..: Between medium f-band and low f-band (without dipole).

Dipole: Resonance (without triband tuning section) between medium f-band and about 80% of low f-band.

**FIG. 10. Three frequency tuned circuit.****FIG. 11. Three frequency tuned circuit.****FIG. 12. TYPE. A.****FIG. 13. TYPE. B.****Fig. 14**

The Type-A or Type-B tuning sections (Fig. 12 and Fig. 13) form with the dipole element halves a triband dipole or any element of a triband yagi aerial. Similar elements may be tuned to work as director(s), radiator or reflector(s). The radiator or other elements as well may be fed.

**FIG. 14.****FIG. 15.**

**Fig. 15**

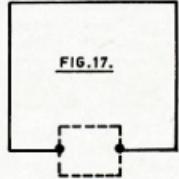
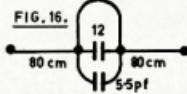
**A triband ground plane aerial.** Type-A or Type-B tuning sections may be connected to I and II.

**Fig. 16**

**Triband v.h.f. beam element** with Type-B tuning section in symmetrical form. Bands at 64 Mc., 102 Mc. and 195 Mc. are covered with this set-up. The tuning inductances are short wire or tubing loops.

**Fig. 17**

**A single loop cubical quad triband element** which can be tuned to three bands with the tuning sections shown in Fig. 12 or Fig. 13. Such a cubical quad has only 1/4 the weight and wind resistance of a full size three loop cubical quad of the same mechanical strength.



The mechanical and installation difficulties are many times smaller, so is the cost of the mast, rotor and maintenance. Yes, it is a compromise and the gain is less, but it still puts the signal in good DX company. It is the quad that will be tolerated at many more locations than the big brother presently is. This quad could be used as indoor aerial strung at two opposite room walls. The tuning sections can be switched to change the reflector or radiator function, to make the quad usable in two directions.

The quad is known to be quite effective at less than one wavelength in height, which is the main reason why many quads are better than too low yagi beams.

**Triband Tuning:** Low f-band resonance depends mainly on dipole length and L1.

Medium f-band resonance depends mainly on C1 and L2.

High f-band resonance depends mainly on C2 and L2.

The aerial must be efficient, because correctly built tuning sections do not become warm, a low v.s.w.r. can be obtained. The radiation pattern shows deep nulls at the sides and the normal beam front-to-back radiation ratio.

### EXPERIMENTS WITH TRIBAND ONE-LOOP CUBICAL QUAD ELEMENTS

Example: Desired band frequencies: 80 Mc., 60 Mc. and 40 Mc. Midband frequencies for tuning section (alone) 70 Mc. and 50 Mc.

**Fig. 18**

a and b—

L1—10 turns, 1.7 cm. diameter,  
3 cm. long.

L2—6 turns, 1.7 cm. diameter,  
3 cm. long.

C1 and C2—Trimmer, 10-40 pF.

(a) Wire loop = 4 x 1 m. attached to I and II.

Resonances of  $f_r = 52$  Mc.,  $f_{rs} = 70$  Mc. (without loop).

Resonances with loop: 40 Mc., 60 Mc. and 80 Mc.

(b) Wire loop = 4 x 1.25 m. attached to I and II.

Resonances of  $f_r = 52$  Mc.,  $f_{rs} = 84$  Mc. (without loop).

Resonances with loop: 40 Mc., 60 Mc. and 80 Mc.

c and d—

L1—6 turns, 1.7 cm. diameter,  
2.5 cm. long.

L2—4 turns, 1.7 cm. diameter,

1.8 cm. long.

(c) Wire loop 4 x 1 m. attached to I and II.

C1 = 38 pF, C2 = 18 pF.

Resonances of  $f_r = 42$  Mc.,  $f_{rs} = 74$  Mc. (without loop).

Resonances with loop: 40 Mc.,

64 Mc. and 80 Mc.

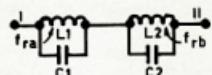
(d) Wire loop 4 x 1.25 m. attached to I and II.

$C_1 = 32$  pF,  $C_2 = 16$  pF.

Resonances of  $f_r = 44$  Mc.,  $f_{rs} = 82$  Mc. (without loop).

Resonances with loop: 40 Mc., 54 Mc. and 80 Mc.

**FIG. 18.**



**Example: One-Loop Triband Quad Element for 14, 21 and 28 Mc.**

**Fig. 19**

Coil former—3.7 cm. diameter, 8 cm. long.

L1—7 turns, 1.6 cm. long.

L2—5 turns, 1.1 cm. long.

L3—4 turns, 1 cm. long.

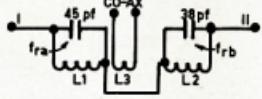
$f_r = 17$  Mc.,  $f_{rs} = 23$  Mc. (without loop).

Wire loop—4 x 3.5 m. = 15 m. long, attached to I and II.

Spacing of two one-loop elements: 2.5 m.

V.S.W.R. over all three bands below 1:2.

Type-A or Type-B tuning sections may be used with similar results.

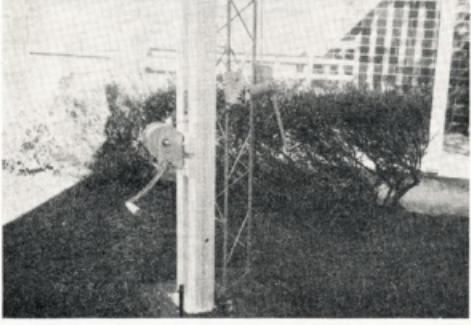


**FIG. 19.**

### FEEDING METHODS FOR MULTIBAND AERIALS

A simple link coil as shown above may be used. The earlier versions of the VK2AOU beam made by DJ2UT had this link coil and a single co-axial feed line was used. He developed more recently a two element feeder method with a crossed over connecting feeder, to feed also the reflector, which made the front-to-back ratio (reflector tuning) less dependent on the beam height.

(Continued on Page 10)



Steel mast with crank up winch, right. Left, 12 feet supporting mast with tilt over winch (boat winch).



Three element triband beam at VK2AOU with central tuning sections from DJ2UT about 55 feet up. A TR-44 rotor is now in use.

# A HANDY D.C. SUPPLY FOR THE BENCH

ROLF B. PETERSEN, VK5ZIE

LONG with many other Amateurs, I felt the need for a flexible general bench supply for development and testing of a wide variety of transistor circuits.

After some thinking and looking around, I came across a Trimax TP1550B transformer, which seemed to be just begging to be put into such a supply. It has four 6.3v. windings, one of which is centre tapped, and one of 5v., all at 3 amps. r.m.s.

I thought that it would be best to keep things quite simple and that a few hours of development and a few more for the final build up would be sufficient. Three months later! I had what seems to be a very useful piece of gear, only, it's not very simple. In fact, when I finally finished it, we will have a fairly ambitious project.

As it stands its has no overload protection, so some care is needed when using it. The overload protection will be added later, probably when I blow up some transistors.

current ( $I_{CBO}$ ) of germanium ones will upset the works.

The small transistors should all be mounted so that they won't be heated by warm components, e.g. power transistors, rectifiers and transformers. The same of course goes for electrolytic condensers. Easy and ample airflow through the unit should be provided.

Now let us have a look at the circuit diagram. The first thing we see here is that there are three supplies. The one in the middle is the main supply which carries the load, and the two are auxiliaries.

The regulated supply at the bottom provides a stable +20v. rail which is used as the reference source. The tranny was hand wound on an existing core.

From the one on top we get 6.2v. which is riding on the output rail and is used as collector supply for the amplifier transistors and the first emitter follower. This is known as a pre-regulator and it greatly improves regu-

little. A 4,000  $\mu$ F. 50v. condenser is used as reservoir and from it the regulator 2N513B is feeding the load through 40 megohms which gives the meter a 2.5a. range. A spare relay contact at this point keeps the meter disconnected until the first charge-up surge into the 5,000  $\mu$ F. condenser has passed.

A d.p.d.s. switch serves to convert the meter to a voltmeter and, having a 50v. range, it then monitors the voltage right at the output terminals. This is also the sensing point for the error amplifier. Switch 1b selects a suitable tap on the 1K resistor chain for every chosen output voltage. The 1K pot. at the base of the first amplifier is a front-panel control and sets the exact voltage at the output. It is possible, on the higher ranges, to turn the output voltage down beyond the next lower step, i.e. from 24v. to below 18v. This should not be used as it may overload the 2N513B and, if driven too far, will result in inferior regulation. However, the full range of 6v. from one step down to the next can be confidently used to the full two amp. capacity.

The bottom end of the chain goes via 2.7K and a 2K trimpot. to the +20v. reference rail. On initial adjustment the output selector S1 is set to 6v. and the 2K trimpot. is then used to set the output to just over 6v. with the 1K front-panel control fully c.w. Before that, of course, the 20v. reference supply must be adjusted.

The error amplifier is a differential type and uses four BCY11 transistors in Darlington connection. These four transistors must be thermally strapped together. To do this I used four Philips mounting clips and screwed them back to back in a sandwich fashion. No other heat sink is required at this place.

The 513B is mounted on a commercial heat sink which is insulated from the remainder of the unit. There is no mica insulator between the 2N513B and its heat sink, for better heat transfer. This transistor is driven by two emitter followers, a 2N1183 and a BCY11. The leakage current of the transistor used in place of the 2N1183 must be low, even at high ambient temperatures, to enable the output to go down to zero.

Turning now to the +20v. reference supply, we see that it is a straight forward stabilised supply. It contains the relay and time delay RC combination. There is an OA5 diode included which is normally off and comes into action when the unit is switched off. What happens is that upon switching off, the reference supply discharges more quickly than the 5,000 + 4,000  $\mu$ F. condensers in the main supply and they will charge the 1,000  $\mu$ F. condenser in the reference branch the wrong way, which will make the latter ones unreliable after some time. The OA5 prevents the reference rail from going more negative than 0.2 of a volt.

Some experimenting went into the attainment of reasonable temperature  
(Continued on Page 18)

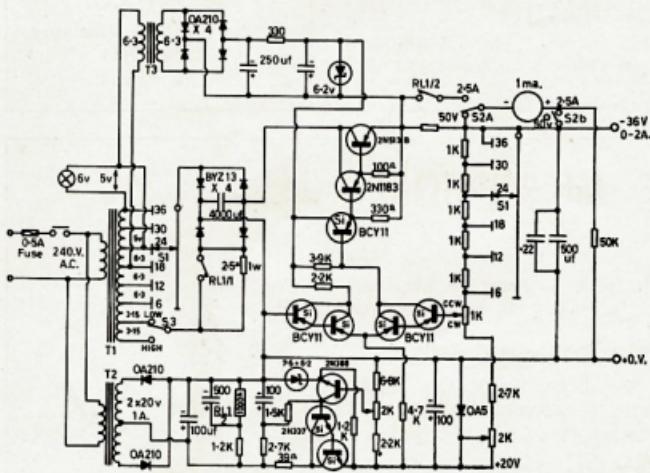


FIG.1. REGULATED POWER SUPPLY.

Performance is fairly good. The supply will deliver any voltage between zero and 36v. at currents up to two amps. Regulation is better than 0.25%, temperature stability is about 0.1%/ $^{\circ}$ C. or better.

One useful feature is the fact that one can simulate flat batteries by connecting a small value variable resistor in series with the output and adjusting the volts to suit.

The transistors used in the unit are types that had been on hand. Other types can be used, of course, as long as their characteristics are similar. It is important to use silicon transistors where indicated, as the high leakage

lation of the output voltage. The transformer (T3) can be a t.v. booster. If a main transformer (T1) with an additional 6.3v. winding can be bought or wound, so much the better.

Back at the main supply, we see that the voltage which is applied to the bridge rectifier is increased in step with the selected output voltage. I did this to keep the dissipation in the 2N513B at a comfortable level.

Also in that part of the circuit is a 2.5 ohm resistor, which is shorted out after 0.4 - 0.5 sec. It limits the switch-on surge current to an acceptable level, thus enhancing the life expectancy of the four BYZ13s and the 2N513B a

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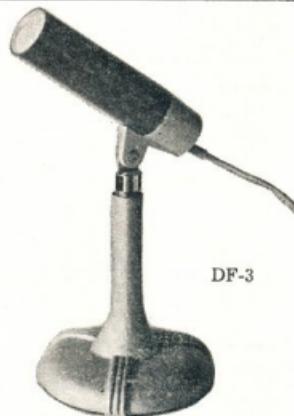
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# TRANSISTOR RADIO NOISE LIMITER

ROY HARTKOPF,\* VK3ZOM

The popularity of transistor car radios means that many are now being used as tuneable i.f.'s instead of the older vacuum tube car radio. There is an added advantage that if a transistorised converter is used, one can have a completely portable self-powered high quality receiver. On 6 and 2 metres, noise is as great a problem as ever and this article describes a noise limiter which has given excellent results over the last two years.

Fig. 1a shows a typical transistor detector and 1st audio stage. A jack for audio input is often inserted be-

there is no clipping at all. When it is at the negative rail end D2 is permanently conducting and D1 is cut off and the receiver is muted.

The advantage of having the shunt diode D2 as well as the series diode D1 is that with D1 alone, if a high voltage positive going spike reached it, the capacitance effect could allow some of it through even though D1 was not conducting. But since D2 short circuits these spikes they cannot reach D1 anyway.

The tone control R4 was used as in most cases there is no space to add an

extra control. R5 and R6 should be as high a value as possible and are best adjusted on test for the desired clipping range, and with a positive polarity the capacitors may have to be reversed. The polarity of D1 and D2 depend on the polarity of the detector diode, OA95, etc.

## TRANSISTOR RADIO NOISE LIMITER

FIG. 1a.

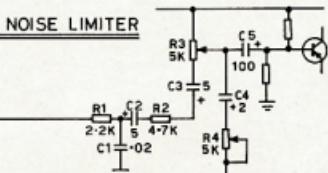
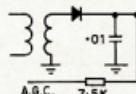
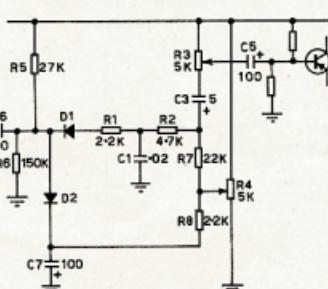
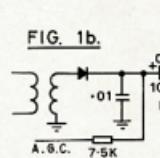


FIG. 1b.



tween C2 and C3. R4 and C4 provide tone control.

Fig. 1b shows the modifications necessary to insert the noise limiter. R4 is used as a voltage supply and controls the level of clipping. C8 prevents the noise limiter from interfering with the a.g.c.

The operation is as follows: The two resistors R5 and R8 establish a d.c. voltage level at the junction of D1 and D2. If R4 slider is adjusted to the same voltage level, both diodes will be on the verge of conduction (only short by an amount equal to their threshold conduction voltage). A positive going spike from the detector diode (which suppresses the negative ones anyway) will block D1 and cause D2 to conduct, thus shorting the spike to earth.

As the slider of R4 is made more positive we have D1 conducting and D2 cut off and the level of the clipping thereby raised. When the slider of R4 is at the earth end (positive earth)

## NEW SUPRA HIGH FREQUENCY RECORD CLAIMED

VK3AQ has obtained a special licence to radiate transmissions of the order of 300,000 mega hertz and is now claiming a record of 700 cm. for a two-way contact using interrupted continuous wave. The final stage uses 100,000 volts on the plate at a current of 300 mA. The plate is made of tungsten and has been placed on silver bearings so that it can be rotated at high speed by an external induction field and thus distribute more evenly the tremendous heat liberated and so avoid burning a hole in the anode—so far water cooling has not been used.

The receiver consists of an ultra sensitive silver detector which automatically records the result of the contacts. When ways can be found to amplify satisfactorily at this frequency, longer transmission distances may be possible.



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## ADDITIONAL NOTES ON TRANSISTOR REGULATED POWER SUPPLIES

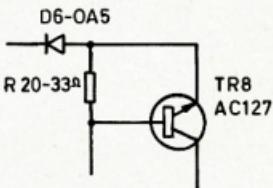
The referred to power supplies featured in "Amateur Radio" in February, April and May issues, 1967. R19 of the power supply (April issue) should be 30 watts, not 3 watts as shown. In Fig. 2 (same issue) the AC127 is shown as a PNP when it is an NPN type, see accompanying diagram. It is suggested

uF, capacitor wired across the base-collector of the AC128 control transistor TR2. A paper capacitor may also be placed across the output of all these supplies, should the electrolytic across the output go open; all sort of funny effects can occur such as oscillation of the more sophisticated of these supplies.

Now referring to the a.c. supply for the 122 set, R6 is the 1 ohm resistor in the collector lead of the 2N441 transistor and R5 is the 680 ohm resistor between the plate of the VR150 and pin 2 of the Set Input. A modification to save one zener diode Z1. The cathode of VR150 can be taken to the 12 volt regulated line which goes to the valve filaments and heaters, etc., on pin 10 or 12 of the Set input. R1 is the 68 ohm 1 watt resistor.

I hope in the future to design yet another type of transistor regulated power supply using a variable duty cycle multivibrator controlled transistor switch operating at a frequency somewhere between 1 kc. and 10 kc. This type of supply would be much more efficient than the preceding ones that I have described. Depending on how experiments go as to when this proposed supply will be presented.

—Rodney Champness, VK3UG.



**FIG. 2. Correction.**

that C6 in the same power supply should be an electrolytic designed for high ripple operation, this applies to the reservoir capacitor in all four types of supplies described in the three articles.

The two power supplies using output voltage sampling may also have a 0.01

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PT850M 50 ohm Co-axial Cable, per yard	35c
PT90M 55 ohm Co-axial Cable, per yard	28c
PT77M 70 ohm (UR70) Co-axial Cable, per yard	32c
PT11M 70 ohm Co-axial Cable, per yard	43c
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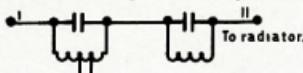
## SINGLE LOOP TRIBAND CUBICAL QUAD ELEMENT

(Continued from Page 6)

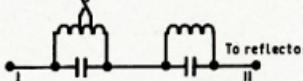
and surrounding objects. A ferrite transformer or cable balun may be used to connect the feeder.

### Figs. 20 and 21

The phase relationship of the fields in L1 and L2 vary from band to band, so that too much direct coupling between these coils has to be avoided. It is not necessary, as originally proposed by the writer, that separate link coils and feeder cables be used to couple to L1 and L2. Coupling to the larger coil is sufficient, as found by DJ2UT.



**FIG. 20.**



**FIG. 21.**

### SOME PRACTICAL DESIGN FEATURES

DJ2UT used short pieces of co-axial cable as capacitors and they are later placed inside the element tubing. The coils and inner capacitor ends are sealed and moulded in resin. The centre section is about 40 cm. long and has 5 cm. diameter. The tuning of the lowest frequency is carried out by adjusting the element length. The medium and highest frequency are tuned by shifting copper rings more or less over the ends of L1 and L2, which can be done from outside without affecting the sealed coils in any other way.

The writer wishes to thank OM Sommer (DJ2UT) and his co-workers for the very considerable amount of work carried out and the many good and practical ideas which made successful aerials with this triband principle.

### REFERENCES

- "Amateur Radio," (VK), May and June 1968, by VK2AOU.
- "DL-QTC" (DL), March 1968, by VK2AOU.
- "Funk-Technik" (DL), No. 16 and No. 17, 1959, by VK2AOU.
- "Brem-Itz" (ZL), June and July 1963, by VK2AOU.
- "Antenna Book," by K. Rothamel, DM2AKH, 1963.
- "DL-QTC" (DL), June 1964, by DL1ER.
- "DL-QTC" (DL), April 1965, by VK2AOU.

# NEW CALL SIGNS

DECEMBER 1967

- VK1BW/T-W. A. Wilson, 129 Irvine St., Watson, 2607.  
 VK1ZJF-J. F. Sutcliffe, 4 Wyatt St., Torrens, 2607.  
 VK2BBH-A. Stevens, 58 Wyadra Ave., Harcourt, 2606.  
 VK2BEJ-E. R. N. Jewell, Burringham, 2480.  
 VK2BLU-D. I. Jewell, 17/165 Botany Rd., Mascot, 2020.  
 VK2EZY-B. H. Sheldon, 362 Western Hwy., Wentworthville, 2145.  
 VK2ZIN-J. R. Avery, 11 Raglan St., Mosman, 2088.  
 VK2ZPP-F. J. Ryan, 58 Wicks Rd., North Ryde, 2113.  
 VK2ZTQ-R. A. Cameron, 92 Hull Rd., Pennant Hills, 2120.  
 VK2ZWV-W. Wright, 102 Botany St., Carlton, 2218.  
 VK3GJ-L. F. Schmid, 2 Ward St., Ashburton, 3147.  
 VK3HHI-M. Morrison, 27 Clonaig St., East Brighton, 3187.  
 VK3KD-L. Kurcik, 18 Boort St., Broadmeadows, 3004.  
 VK3JUB-E. J. Walsh, 34 St Elmo Rd., Ivanhoe, 3075.  
 VK3JAH-A. Camp, 99 Orchard Gr., Blackburn South, 3130.  
 VK3AGF-R. N. Ferguson, 23 Floral Ave., East Mildura, 3500.  
 VK3AID-J. Glenn, 1 Plumkett Ave., Ormond, 3204.  
 VK3AJ-S. J. Slade (Capt.), 22 Westerfield Ave., North Clayton, 3168.  
 VK3APY-J. H. Wilson, 14 Brook Dr., Altona, 3018.  
 VK3AXW-J. L. Boyce, 181 Huntingdale Rd., Mt. Waverley, 3148.  
 VK3AXP-L. J. Kelly, 26 Cambridge St., Belmont, 3216.  
 VK3AZG-B. Gardiner, 63 Edinburgh St., Clayton, 3168.  
 VK3BBB-R. C. Arnold, 41 Grammar St., Strathmore, 3041.  
 VK3ZFK-R. F. J. Caleo, 8 Ryder St., Niddrie, 3042.

- VK3ZKB-K. J. Bond, 61 O'Shannessy St., Nunawading, 3131.  
 VK3ZMH-R. F. Harris, Harris Gully Rd., Croydon, 3128.  
 VK3ZOT-Traralgon Technical School, Station: Grey St., Traralgon, 3844; Postal: P.O. Box 68, Traralgon, 3844.  
 VK3ZUV-D. W. Burnham, 32 Faversham Rd., Cranbourne, 3151.  
 VK3ZUX-K. C. James, 61 Northernhay St., Reservoir, 3073.  
 VK3ZVF-B. P. Cranston, 5 Belvoir St., East Doncaster, 3108.  
 VK3ZWV-H. J. Dawson, 34 Ross St., Surrey Hills, 3127.  
 VK3ZWQ-D. S. McQuile, 16 Clarke Ave., Caulfield, 3162.  
 VK3ZXD-I. W. Bourchier, 66 Elizabeth St., West Geelong, 3056.  
 VK3ZXG-W. V. Storey, Zig Zag Rd., Eltham, 3095.  
 VK3ZYC-J. E. Collins, Blackwood Ave., Belgrave, 3128.  
 VK3ZYD-D. R. Jones, 329 Lower Heidelberg Rd., Heidelberg, 3064.  
 VK3ZYW-B. W. McLean, 313 Crompton St., Ballarat, 3350.  
 VK3ZC-N. W. McCay, 69 Thames St., Box Hill North, 3128.  
 VK3ZZN-J. Spindler, Station: Flat 1, 12 Munro St., Armadale, 3143; Postal: C/o Post Office, Cressy, 3322.  
 VK3ZPZ-D. J. Pinson, 24 Salisby St., Essendon North, 3041.  
 VK4NF-A. H. Williamson, 129 Esplanade, Cairns, 4870.  
 VK4TL-J. E. Roberts, Murray's Corner Store, Trinity Beach, via Cairns, 4870.  
 VK4ZLJ-L. C. Hemming, 116 Ninth Ave., St. Louis, 3120.  
 VK4ZMR-D. M. Ryan, 30 Richland Ave., Coopers Plains, 4160.  
 VK4ZY-Veronica Street High School Radio Club, Villa St., Yeronga, 4104.  
 VK5AH-A. H. Brooks, 89 Blight St., Ridleton, 5008.  
 VK5VU-V. W. Stallan, 43 Davoron Rd., Elizabeth Fields, 5113.  
 VK5ZKM-K. H. May, 103 Swanport Rd., Murray Bridge, 5253.  
 VK5ZPK-W. N. Kirby, 34 Churchill Rd., Ovingham, 5002.

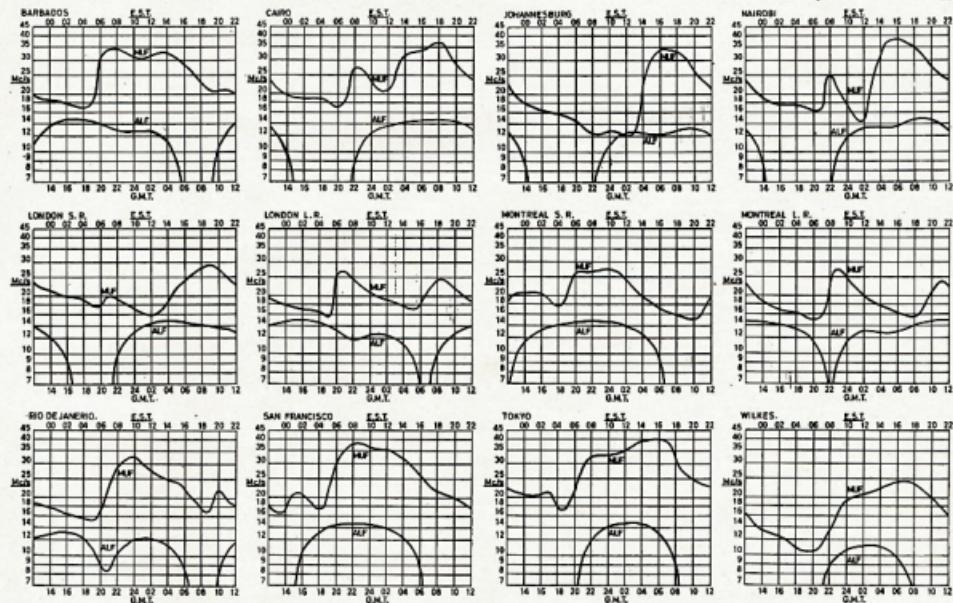
- VK5AB-E. J. Boudell, 9 Tautog St., Exmouth, 6707.  
 VK5ER-A. E. Ray, 5 Learmonth St., Exmouth, 6156.  
 VK5KL-K. L. Miller, 7 Freeman St., Melville, 6156.  
 VK5ME-M. A. Elliott, 43 Pandora Dr., City Beach, 6015.  
 VK6ZAC-P. Marks, Aquinas College, Manning, 6152.  
 VK7DE-D. E. Burkinshaw, 39 Philosopher St., Savage River, 7231.  
 VK8ZDE-H. W. Spaulding, D.N.R.S. Coonabarabran, 5790; Postal: C/o. H.F. Broadcast Project, P.M.G. Dept., Darwin, 5790.

## CANCELLATIONS

- VK2AYS/T-W. A. Wilson. Now VK1BW/T.  
 VK2ZGN-J. E. Gelston. Transferred Interstate.  
 VK2ZSU-J. S. Churchill. Transferred Interstate.  
 VK2ZSU-J. F. Sutcliffe. Now VK1ZJF.  
 VK3ET-B. F. Farrar. Not renewed.  
 VK3NS-R. Bennett. Deceased.  
 VK3ZL-A. W. Stallan. Now VK4VU.  
 VK3ZAU-E. A. Stevens. Now VK3BBB.  
 VK3JATE-B. C. Pulford. Not renewed.  
 VK3JATV-J. F. O'Toole. Not renewed.  
 VK3JAWR-W. E. Knapp. Not renewed.  
 VK3ZK-A. H. Hescock. Now VK2ZFG.  
 VK3ZGM-J. W. Cercetti. Not renewed.  
 VK3ZMY-L. A. Camp. Now VK3ABN.  
 VK3ZQI-L. F. Schmidt. Now VK3GJ.  
 VK3ZSQ-B. Gardner. Now VK3AZG.  
 VK3ZTN-D. E. Stackpole. Transferred to South Australia.  
 VK3ZVF-L. F. Kurch. Now VK3KD.  
 VK4BH-H. Brown. Deceased.  
 VK4HG-J. M. Hamilton. Transferred Victoria.  
 VK4NX-N. Williamson. Now VK4NF.  
 VK5ZBZ-J. A. Zubrinich. Ceased operation.  
 VK5ZLJ-A. R. Jenkins. Not renewed.  
 VK5ZSJ-J. L. Sinclair. Now VK2ZJ.  
 VK6ZDJ-L. M. Miller. Now VK5KL.  
 VK8ZCF-H. Schroder. Transferred to New South Wales.

## PREDICTION CHARTS FOR APRIL 1968

(Prediction Charts by courtesy of Ionospheric Prediction Service)

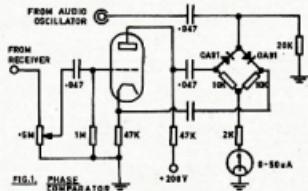


# USING A PHASE COMPARATOR

K. C. BICKNELL,\* VK6ZCB/T

This article is designed to help many who will be endeavouring to extract telemetry data from the Oscar Australis satellite. The telemetry takes the form of an audio frequency appearing in the range 500 cycles to 3 Kc.

To obtain accurate data from this a means of measuring the frequency is required, once the frequency is known the use of calibration charts will give details of satellite functions. As can be seen, reasonable accuracy of audio frequency measurement is essential. Methods used can be direct reading frequency meter or digital frequency meter, however these can give inaccuracy under noisy signal conditions. Another method is to use a standard oscillator and compare it with the audio signal from the satellite. This can be done by feeding both into a c.r.o. and forming a Lissajous pattern; this system is difficult when noise on the incoming signal is fairly high. One other point is that not many shacks are equipped with digital frequency meters or a c.r.o. A simple method is to compare the two frequencies by ear but once again under noisy signal conditions accuracy of reading is hard to obtain.

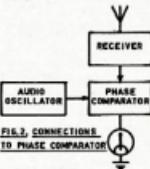


By using a phase comparator we overcome the noise problem and have a cheap direct reading device that can be used off receiver audio during a satellite pass. This means that those who don't have recording facilities can still extract important information and assist in the project. However, this unit can be used in conjunction with tape, after the pass, to extract data.

There is one problem, however, tape recorders have inherent wow and flutter, which will cause frequency modulation of the recorded signal. To determine the unknown frequency under these conditions the standard oscillator is tuned until the meter deflects negatively or positively, depending whether you are high or low in frequency. As you near the exact frequency the meter will oscillate between negative and positive, and when the amount of deflection is equal in the negative and positive directions the frequency is exactly in phase and a direct reading from the oscillator calibration can be taken. When measuring from tape, the frequency and severity of the deflection will depend on the condition of your tape machine.

When measuring under ideal conditions, such as direct from receiver audio, a steady negative or positive reading will appear on the meter. When the standard oscillator is exactly on frequency the meter will read zero. There will be no reading on the meter until the standard oscillator approaches the frequency of the unknown signal. A sudden deflection occurs when about 20 Kc. off frequency, it is then only necessary to adjust the standard oscillator until the phase comparator unit reads zero.

A short description of the phase comparator (Fig. 1) may help you to understand its operation. It is basically a bridge, of which two arms are fed from the unknown signal, one 180° out of phase with the other, obtained using a phase splitter. The standard source is fed into one leg and the other side of the bridge is fed to a centre zero 50 uA. meter.



The unknown signal being 180° out of phase, will produce no output; this also applies to any noise on the incoming signal. When the standard signal is not in phase with the unknown signal, the bridge will be unbalanced, one diode will conduct depending on the phase relationship between the signals, and a negative or positive voltage will appear at the arm of the bridge being metered. As the two frequencies approach each other the meter will move towards zero. When both signals are in phase the bridge is once more balanced and a zero reading will appear on the meter.

As you can see, unless noise is occurring at approximately the same frequency as is being read, it has no effect on the meter reading. Under test conditions a 1 Kc. tone was set up on a c.r.o. and receiver noise was added until the original signal was not visible, being completely masked by noise. There was no change in accuracy of measurement, and for that matter, no indication of the presence of noise.

I will not add a circuit of the audio oscillator, as many circuits have been published. One in the December "Electronics Australia" should be suitable, but one improvement would be to bandspread the range between 500 cycles and 3 Kc. to obtain greater dial calibration accuracy. Any commercial unit should be suitable, provided its calibration accuracy can be trusted.

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# SSB

Sub-Editor: PHIL WILLIAMS, VK5NN  
37 Wimms Rd., Coromandel Valley, 5051

## HAMILTON S.S.B. GATHERING

The January 1968 holiday week-end saw yet another successful Sidebanders' Gathering at Hamilton, Victoria. This was the third of these week-ends, which are held every other year. Local organisation was by Danny VK5ADD, Ern VK3AEM, and Tim VK3TW, all of Hamilton, assisted secretarially by Dud VK2DQ, who, unfortunately was kept at home in Broken Hill by a throat infection.

Sidebanders assembled at the Western Motel on the Saturday afternoon before the dinner in the evening. Several arrivals were filmed and shown on the Ballarat Regional Television that evening. With true journalistic licence the announcer described proceedings

tions governing power output of s.s.b. transmissions.

The second speaker was George VK3VX, who is the Institute's I.T.U. representative and organiser of the "Intruder Watch". He stressed the reasons why band occupancy is so important if we are to retain their use and not have them swallowed up by broadcasters and other unidentified intruders.

Geoff VK3AC had a few words of wisdom on further measures for mobile interference suppression. He followed this with a tape of Mr. A. Hancock as a Radio Amateur which gave us all the chance to laugh at "ourselves as others see us".

Finally Ray VK3ATN told us of his 2 metre moon-bounce experiments for which he received his Award of Merit from the A.R.R.L. He did well to tell us so much in the short time available, and concluded with tape recordings of the actual moon-bounce contacts.

Should you contact any VK sidebander who tells you that "It raining in Tokyo is not," you will know that he enjoyed his visit to Hamilton—January 1968.

In the original circuit a simple screen grid dropping resistor was used, but I found it necessary to use a voltage divider, as shown in Fig. 1, otherwise, when you try to bias the 6BA6 grid to reduce its gain, the screen grid draws less current and its voltage swings up to almost full h.t. and the gain does not reduce as required. Adding 100K from grid 2 to earth had the desired effect.

As published, the 6BA6 had a plate load resistor of only 22K ohms, and so its output was very small. Obviously the original was intended to provide an output signal at a level similar to the microphone. Increasing this to the 100K ohm shown gave sufficient drive for the 6C4.

The 6BX6 only amplifies the signal and the network with diodes, resistors and condensers which follows it, provides the control bias for the 6BA6. The a.f. signal is fed to the 6BA6 by the 0.0068 uF. capacitor. The OA85 diodes are nothing special and any germanium diodes with high back resistance will be satisfactory. Those used measured about 0.5 megohms on the ohm meter's "ohms x 1000" scale.

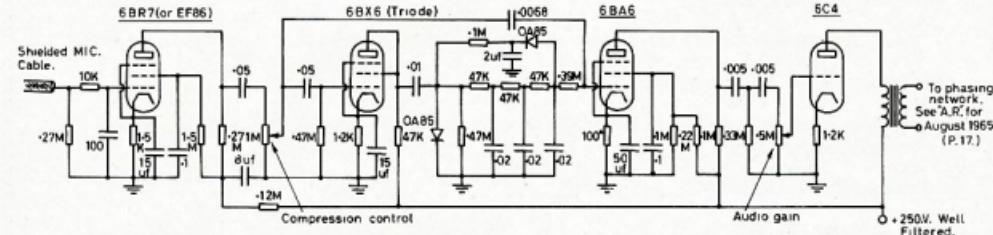


FIG.1 AUDIO AMPLIFIER FOR SSB EXCITER - WITH SPEECH COMPRESSION.

at the Hamilton "Single-Side-Board" convention, but this was "heavily" corrected at the second showing. How would they react if we were to refer to their "vestigial sideboard transmission"?

The trip to Hamilton was hot for all travellers except for John VK2QJ and XYL Ruth, who flew down from Berri (N.S.W.).

It was much cooler next morning for the technical lecturetes at the R.S.L. Hall. The first speaker was your scribe with a brief review of current matters of interest to sidebanders, in particular the newly promulgated P.M.G. regulations.

## SPEECH-COMPRESSION FOR EXCITERS

I have built speech compressors before, the old type with push-pull variable-mu tubes with transformers and full-wave diodes, and more recently the transistor type, to save space. The former are too large, and the latter appear to add quite a bit of distortion which some hours of persistent work did not correct.

Then came the simple valve job in February 1963 "QST," so I decided to build it into the exciter here at VK5NN. I have followed the original circuit rather loosely, and made the following discoveries and changes:

The original amplifier was shown in August 1963 "Amateur Radio" on p. 17. This used a 12AX7 followed by a clipper to drive the 6C4 output stage. Two more valve sockets were fitted to the chassis, the first a 9-pin (oval) and next a 7-pin miniature for the 6BA6 controlled tube. The first change was to re-wire the 12AX7 socket to take a 6BR7 low-noise audio tube—much like an EF86 which is probably more readily available in Australia.

A 6AB4 triode was hard to find so a 6BX6 was used as a triode, but it was necessary to double the plate resistor to 47K to get sufficient voltage out of the stage to bias off the 6BA6.

This compressor appears to do the job without introducing distortion. If you expect to be able to walk around the shack and talk, letting the poor compressor take up the changes in level you will be disappointed, but tests on the air showed that it had adequate control from about 2 feet to 3 inches from the mouth, with normal speaking, although room echoes, the clock, the dogs and kookaburras, all tend to show up between words if the mike is too far away.

The beauty of this compressor is the small space it took to build it into the exciter. It will certainly be useful for shack visitors, especially when "Jamboree of the Air" comes around again.

73 for now, Phil VK5NN.

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## TECHNICAL ARTICLES

Readers are requested to submit articles for publication in "A.R.", in particular constructional articles, photographs of stations and gear, together with articles suitable for beginners, are required.

# BARGAIN!!!

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- ★ Galaxy V Mark 2, \$550.
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- ★ Gonsett SB2 2 metre SSB Transceiver with 110 power supply, \$400.
- ★ Imported Hy-gain TH6-DX Thunderbird Antenna with the new BN-86 balun included, \$220. Without balun, \$210.
- ★ Hy-gain TH3-JR with BN-86 balun, \$110. Without the balun, \$100.
- ★ BN-86 Balun, \$17.50.
- ★ Ham-M heavy duty Rotator, \$180.
- ★ Soon available: German 9 Mc. super Filters with 8 crystals, \$40.
- ★ HA-14 Linear Kits with power supply, \$225.
- ★ Heathkit HW32A single band Transceiver Kit for 14 Mc., \$170.
- ★ New-Tronics 4BTB 80-10 metres Vertical, \$70, or without 80 metres top loading, \$55.

Since the absence of Arie overseas, I have been doing my best to meet the needs of all. He informs me that in a short while he will be homeward bound with a stopover in Japan to glean from what is offering there the best in Ham gear and this will be put on the market on his return at our usual competitive prices.

—Alex Outtrim.

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## Moon-Bounce Schedule

The following information was received from the Foreign Section Editor, V.E.R.O.N. V.h.f. Bulletin, Schiedam, Holland (Box 19).

### SPECIAL BULLETIN

From: Crawford Hill V.h.f. Club, W2NFA, Holmdel, New Jersey, U.S.A.

Issued: January 10, 1968.

**Subject: EME TEST—An EME Test is scheduled for April 14-15, 1968, at Crawford Hill. All stations having adequate 1296 Mc. equipment are invited to participate. The schedule request will be honored in advance by mail. Please state equipment capability.**

An alternate test period is also provided in the event that local weather or technical difficulties prevent operation on the above dates. The alternate test periods will be April 18-20, 1968.

Station equipment at W2NFA: Transmitter power, 200 watts minimum output; transmitter frequency, 1296,000 plus or minus 5 Kc. Mode of transmission, c.w. or f.s.k. Antenna, parabolic reflector, minimum gain 10 db., above isotropic. Polarisation, right circular transmit, left circular receive (I.R.E. definition). Receiver n.t., 3 db.

Moon visibility at W2NFA (40.1 degrees N, 142.4 degrees W):

Moon Rise 2300 GMT, April 12, to Moon Set 1028 GMT (Friday night orbit—most stars visible).

Moon Rise 0619 GMT, April 13, to Moon Set 1657 GMT, April 14.

Moon Rise 0220 GMT, April 19, to Moon Set 1520 GMT, April 19.

Moon Rise 0705 GMT, April 20, to Moon Set 1832 GMT, April 20.

**Procedure:** Echo testing commence at moon rise and continue for one half hour prior to any schedule. Estimated echo S/N in a 1 kc. bandwidth is plus 11 db.

All reports of reception will be greatly appreciated.

Official liaison station: WB2NDH will assist as official liaison station on either 14.235 kc. 21.385 kc. or 26.995 kc.

### ATTENTION VH.FERS

During the months of April 1968, Iceland will be represented on 144 Mc. From approximately May 1st to 15th, April 1st a station will be in operation at Keflavik on the 7, 14, 21, 28 and 144 Mc. bands, using maximum legal power (150 watt input). Sufficient system gain should be available to almost guarantee contact with the U.K. on 144 Mc. Skeds with other countries will be desired.

## Publications Committee Reports

**February Meeting**—The committee received correspondence from VK5 2AK, 3AHS, 3ASC, 3AMK, 2ZGC, 2ZKC, 2ALM. Technical articles arrived from VK5 SAOU, 2JR, JUG (2) and 4RM. These contributors will, as usual receive acknowledgement through the mail.

It was decided that we would, in future hold our meetings on the first Monday in the month unless the second Monday falls no later than the eighth of the month. By this means, we can avoid late meetings and the exclusion of monthly reports through meeting nights falling due after "A.R." has been passed to the printer.

The financial position of "A.R." was considered, and as a result we resolved to publish fewer pages for the next few months and to approach Federal Convention for a price increase. The future of "A.R." depends on their decision.

After reviewing all the technical articles published in the previous year, it was decided that the Award for Technical Articles should be made to Messrs. K. A. Kirchhoff and P. T. Hine. Many names were considered for the Higginbotham Award. It was agreed that this award should go to Ian Berwick, VK3ALZ, as recognition for his consistent submission of articles on original work and research he has done.

**March meeting**—Technical articles were received from VK5 ZZPM and 2ZCB, whilst correspondence was received from VK5 2AFD, 2ALM, 4ZLM and Owen Mace of Project Australia.

Discussion centred round the unsatisfactory position with the mailing service, and the possibility of making a change will be again investigated. A number of letters have been received on the subject of the new amateur bands and particularly the code speed requirements. These are, at the time of writing, with Federal Executive for vetting, and will all be published in the May issue.

### SUBSCRIPTIONS DUE

All members of the W.L.A. are reminded that annual subscriptions are now due and should be paid promptly to their Divisional Secretary. Non financial members will not receive a copy of "A.R." and back copies may not be available upon request. To preserve continuity of your files of "A.R." please pay your annual subscription now.

## A HANDY D.C. SUPPLY

(Continued from Page 7)

stability of the 20v. rail. I found a fair solution by using a 6.2 + a 7.5v. zener diode together with a germanium transistor, the 2N388, as an amplifier.

All three supplies rely on a charge of the reservoir condenser to near peak transformer voltage for proper performance. Therefore, the transformer diode combination must have the required peak current capabilities.

Switch 3 is left in the low position for light loads and is put into the high position if the output voltage drops under load. There is a possibility that the output may drop under high load in the 6v. position of S1. If that occurs, the lead from S1a pos. 1 can be connected to the 12v. tap and the switch No. 3 put to low, thus applying 9.45v. to the rectifier.

The top supply, or pre-regulator, keeps a more or less constant current in the 3.9K collector resistor of the amplifier. This current is then distributed between the base and collectors connected to the right hand side of 3.9K according to input voltage level and load and Mr. Kirchhoff.

The first emitter follower, the BCY11, also benefits from a constant collector supply.

Now then, with a fairly well stocked parts shelf, some patience and the above words, plus circuit, you can, if you wish, go to it. Shouldn't take you three months.

## VK-ZL-OCEANIA DX CONTEST

(Continued from Page 15)

### Listeners' Section

A3942	2074	REF18783	1896
A5224	3682	SP2-7143	380
B10-36431	6200	SP2-7143	380
GIV7796	114	TA-7431	380
DL12090	2604	AD-37920	460
DL10101	44	UA-13982	670
DM2542/L	120	UA-14144	55
DM2588/M	320	UJ5-063-3	55
DM2588-N	900	UJ5-063-3	100
DM0772/J	18	UA-9721	448
DM2164/F	18	UB6-8970/UA4	1274
KA3RGS/F	132	UB6-8461/UL7	968
DM4029/L	618	UG2-4077-19	1864
DM4029/M	1309	WV-11606	1864
HAS-153	60	UB6-4367	4680
HAB-023	280	VE3-11606	24
IT1-12667	720	VU-SWL0658	620
JAT-1819	888	WF2EFZD	1120
JAT-1820	1828	WF2EFZD	1120
OML-2913	1304	WF2EFZD	2626
ONL-388	16912	WF2EFZD	48
NLS19	585	WS-8260	560
REF17535	360	YU2RS-233	48

### Check Logs

EISF	OZ7KVM	ZS6D
JA1MIN	PZ1CQ	SMTMO
JA1TII	PZ1CQ	SMTMO
L21YW	SP2DMM	PABNP/C
OE3WWB	UA3KHA	G3WP
OH3NY	UB3PG	DM4HD
OH3VY	VK3HIL	DM3WSO
OH3SM	WIWY	DM3BEE
OZ3GW	WIEZ	DM2BLTO
OZ3FO	WA4ZR	DM2BLTO
	YQ4KCA	

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# SWL

Sub-Editor: D. GRANTLEY, WIA-L2022  
P.O. Box 222, Penrith, N.S.W., 2750

## PERSONAL NOTES

Welcome to the page for Steve L5088, of Croydon, S.A. Steve has just started to move along in the s.w.l. field, under the care of Alan Raftery. Steve has a methodical approach to the QSLing side of the game and to date has handled 120 cards with various logbooks including VPAU, VK0JW, UAIKWBW, 9X5CE, ZS8L, XW8BS and KPDGDC.

Welcome home to Ernie Luff, who, following another spell in hospital left the fair city of Sydney with a crew which took him to VR2. Despite this inactivity he is doing well in the QSL field and with 238/171, he looks like moving into my position on the ladder are long. His most recent QSLs are VSEZV, YO9N, VE1EAB, VE1EBC, UTAQO, VK1KAA, VK4AHG, VP1ILB, VP1IS, FB8KJ, VR1L, WSGUZ and GC3FKW. He has just received the Saskatoon Wheat Belt Award, which is not normally available to s.w.l.s, but an Honorary Certificate has been issued in Ernie's name.

Talking of awards, I have received a letter from one of our best known, and least heard of listeners, namely Chas Thorpe of Rockhampton, 9Y00. Chas has been with us since March 1960 and has a fine record. My corrected error which I made when I mentioned that Ernie was the 1st Q.S.W.L. to receive the Calgary Award. In fact, Chas was the first, his certificate being No. 251, issued on Jan. 3, 1961. As can be seen, awards are not so plentiful, including the Klondike award (1st VK S.W.L.), 30 Canadian Cities (1st Oceania S.W.L.) worked all ZL, worked all Pacific (1st VK S.W.L.) and was the first person to receive the worked all VK8 award. I am sure there is still time to earn these awards, but maybe Chas will drop me a line with the details and we can then discuss it.

Mac Hilliard over in Campsie has been having fun with a meter with an opening from early afternoon until well into the night. This has compensated somewhat for the indifferent conditions on 6 metres. It is interesting to note that from all over the world I am getting reports of the same terrible conditions on 6 metres. Fred M. Miles, Bernard Hughes and John Stansfield from G.M land all proclaim the fine conditions, whilst Art Borredale in Spain mentions it.

Another sidelight to this is a tape of dubious origin which Ray Mosely from Nottingham in England made from Citizen Band transmissions emanating from the 11 metre band in the States. These guys using 5 watts are skipping their way regularly across the Atlantic.

We have our moments and the rest of these were the latter part of January when I logged F5VN/FK, SV0WV (Greece), M1B (Geom Maria Graziana, Piazza Dello Stradone, San Marino) and the more interesting PG1XT, CE0AE, T1CEP (Box 4462, Sao Jose). Most of the more regular ones made an appearance.

Just a stop press from Ernie Luff in reference to the Klondike award. There may have been some confusion over these awards because of the lack of a simple way to give the exact data on the Klondike awards. Ernie was issued with No. 14 and Charles No. 37. It is good to see competition amongst listeners in our country, for let's face it, the S.W.L. is not a fighting force in Amateur Radio, in fact in very many quarters he is a despised relation.

## DX NEWS

New call signs 7OA-70Z (the O being a letter not a figure) has been issued by South Yemen. 9X5AV, Box 104, Kigali, 9X5BWB, Box 104, Kigali, have been issued to 9X5Z. ZF1DZ, QSL via VK5KDS. If you heard that one signing himself (I believe) Doc, then you have acquired yourself a pirate. VSMRCS will be on from Brunel for a week late March or early April. I understand the operators to be 9M2BD, NSI and HS3RD and they will try to use top feed if required.

Zone 23 is not easily recognised, but here are a couple to help you, UA0YC, YT, YO 9Y and KYA. The first two, on 14255 c.w. are running on 5 a.m. - 7 P.M. on 14255 c.w. and 9W0LYR. The T19 Coco is treasure party are at the time of writing, MM, PA9MDG from the W. Freistens on 12455 s.s.b., TA1DE on 15 m.c.w. on 6935 c.w. and has been heard on 15 m.c.w. on 6935 c.w. on 15 m.c.w. on 6935 c.w. Istanbul. The new address of the KP4 bureau

is Box 1061, San Juan, 00002. The foregoing has been received from Bernard Hughes, of the I.S.W.L. for the benefit of our chaps.

The following Amateurs can be QSLed via the I.S.W.L. bureau: WIFPK, ZL1AIP, G2K0A, WAFR, ZL1CMB, VE2HJ, WAFR, ZL1CMB, WTHDZ, K5MHD, HR8UJ, WESTHL, ZD5X and G3VYV. HG8OF heard on 28 is a special Hungarian prefix. If you hear HSS3J on c.w. don't waste time, as he is a pirate. Another rare prefix for the prefix hunters is PE2EVO from the Netherlands. AL7A heard last October was in fact from Georgia and was the UP-2KNP club.

ST2SA is on 14261 c.w. 3CBXK. The foregoing was from Zone 1. Did you hear GB8QW/MM up to Dec. 1961? Well, I did. Don Miller was on her final trip, CLOPK via W8EGOV, ZS2T via K1GHZ. The QSLs for the aforementioned final voyage for the Queen Mary go to A.R.A.E.B., Box 7493, Ocean Beach, Calif., 98007, U.S.A. Monitor says, "A.R.A.E.B." and VE3GCC is still handling Don Miller's s.w.l. cards. The calls concerned are the VQ9 series and VK2ADY/VK9. Amateurs are cared for by K9TC7, (is VK2ADY legitimate? It is not in the Call Book nor published amendment lists.)

## TOP BAND

Whilst it is very unlikely that any top band loggings of note will be made here, there has in the past month been quite a lot of word wide activity on 10 and 12 metres. While conditions still holding in the northern hemisphere, it is possible that you could hear something, so be on for DL5KWR, GD3DM, GM3GKZ, G1JVVY, VQ9W, ZB3AP, ZC4RB and VK1KAA on 10 m.c.w. and 10070 kHz on Fridays and Saturdays. As this is in daylight hours here, loggings at this time are improbable, however I understand that there has been JA activity between 1807 and 1812 kHz and JA8 and JA9 during the same period of darkness, maybe you can catch something from there. The foregoing news items have been acquired from the I.S.W.L.

## COMMENT

Over the years, there has been a simmering of discontent amongst s.w.l. ranks as to what is being done for them by the W.I.A.

There are many rumblings from the s.w.l.'s about lack of value per dollar paid to the W.I.A. but are these shouts entirely justified? I am not at all happy with the s.w.l. position here in VK and I am far from alone in this. But the analysis of the situation is not the responsibility of the W.I.A. towards the s.w.l.'s. Each State has its Council, who have authorised formation of various sub-groups such as V.H.F. Disposals, Bulletin, S.W.L. and so on. These groups have been formed, maintained, and control their own affairs. If an individual group fails to provide for their members, it cannot be blamed upon the VK2 (for example) Division as a body. It must be placed firmly at the door of the sub-group in question. That the position is not being settled and poor attendances resulting from this are the fault of that group and the office-bearers, nobody else.

The I.S.W.L. have granted permission for the formation of S.W.L. Groups and have made provision for every member to be issued with a universally accepted listener's number. What else can they do? The VK2 Group has been in existence for around ten years now, others may have had a shorter existence but in either case they have had the responsibility of selecting their own officers and it is these officers, not the W.I.A., who are responsible for the success or failure of the group.

The suburban members can, if they desire, or if there is sufficient incentive, attend the

s.w.l. meeting and again this support is of vital importance to the well being of the group. In the 1966 Call Book, S.W.L.'s were listed in the Sydney metropolitan area, with a large number in the outer western suburbs. Travel to Sydney from these areas is difficult and the members don't often see each other and then members won't attend. (I have attended one meeting in 10 years, this when I was on holidays from Albany.)

Of the 59 country members listed, Bob L2263 at Kangaroo Point, to the best of my knowledge, he were to attend a meeting he would get home at 1 a.m. My listed QTH is postal, and in fact I live at Hazelbrook, some 23 miles further out than shown in the Call Book. So while the majority of members have to rely on either country radio clubs which often have little in common with a D.M. minded s.w.l., or keep to themselves and make their results known through "A.R." and use the facilities of the W.I.A. for their activities.

What can the W.I.A. offer an S.W.L.? For one who wants to be a DXer, he can call DX and sending QSL cards, he has a well conducted bureau and although I am still not very happy with the way we get our inward cards, the whole bureau system still represents a service for the s.w.l. who likes to put out a large number of cards. For the S.W.L. who likes to do his own construction, etc., or maybe use the other facilities the Institute presents good value (try and do a correspondence course for radio work from training courses?), and when we consider what the W.I.A. has to offer, I personally feel that in the interest of the Amateur Service as a whole, we as members of that body should do all we can to uplift DXing, DX carding and criticise an organisation which I feel has been responsible for retaining the frequencies which we have today.

Again I repeat, the W.I.A. has made provision for S.W.L.'s to exist and share the facilities, it is up to those S.W.L.'s themselves to provide a sub-organisation which will be of benefit to all them and only they can flourish. The country member is not able to participate, he has no voting power unless by proxy. He should be given the provision of a postal vote, so that he may have a say in elections and one important matter, chaps, if he is elected officer is to be given a vote of no confidence will probably have him removed, if there is somebody to take his place. It can be done, in fact I've seen it at the only meeting I've attended, and in the interests of the Institute it is up to the S.W.L.'s themselves to make sure their office-bearers are doing their job.

Finally, for the country member, or the city member who needs a more exacting S.W.L. involvement, for the time being consider the W.I.A. membership in either the MS.W.L. in London (25/- sterling per annum), and/or the Newark News Radio Club in New Jersey (\$5 U.S.) would be of benefit.

I might add that I am not a member of the VK2 S.W.L. Group; however I am entitled to a S.W.L. title and therefore the number 1000, the number WIA-2232. However, I am a member of the VK2 Div. and, as a vote of confidence, I intend to remain therein. I do utilise the facilities of the I.S.W.L. who have been of great assistance to us here in VK and I hope I have been made a member of the N.R.C. as well as being a member of the Elizabeth A.R.C. in VK5. However, if this batch of notes appear a little longer than usual, it is not due to me with my absorption with the writings of SP5, rather it is due to the fact that we had no notes last month, I will hold the ladder over until next month, by which time all cards will have been cleared from the mail hold-up and we should have some fresh scores. 73, de Don L2022.

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# V.H.F.

Sub-Editor: CYRIL MAUDE, VK3ZCK  
2 Clarendon St., Avondale Heights, Vic., 3034

## V.H.F./U.H.F. OPERATORS PLEASE NOTE

Portable operation during Easter will be undertaken by Des VK5CU, Barry VK5ZMW and Eric VK5ZEJ, from a hill near Palmer, S.A., 35 miles on a bearing 89 degrees east of north from Adelaide. Hours of operation: Sat., 13th April, 1968, 2200-; Sun., 14th April, 0600-1000 hours; Mon., 15th April, 0600-1000 hours, S.A.T.

144.490 Mc.: 100 watts to 10 element beam. Will call for three minutes on the hour on a.m., listen for two minutes. If no contact, will call on c.w. for three minutes commencing five minutes after hour, then listen for two minutes.

432.650 Mc.: 100 watts to stacked 8/8 skeleton slots. Commencing 15 minutes after hour S.A.T. Will call on a.m. for three minutes, then listen for two minutes. If no contact, will call for three minutes on c.w., commencing 15 minutes after hour, then listen for two minutes.

During above schedules aerials will be pointed on a line through Deniliquin, N.S.W., which is midway between Mt. Kosciusko (Keith VK2ZYL) and Mt. Ginninderry near Canberra (Eddie VK5ZEJ). There will be other times beamming VK3, VK4 and VK7. Skewers may be arranged with distant stations on request. Contacts with any stations will be welcome as time and band conditions permit. Further information from Eric VK5ZEJ.

## VICTORIA

Activity on the v.h.f. bands in the Melbourne area at least has been at a very low level. Over the Xmas period no exotic DX was worked. If it was, then those concerned did not advertise very well. On the equipment side of things there appears to have been more activity in the workshop, with a number of s.s.b. signals making their appearances on both 6 and 2 metres, and I am told about 25 stations are active on 432 Mc.

The V.h.f. Group's 6 metre converter sales far exceeded the Group's original plans by a factor of three, and this reflected the appearance of the 200 metre and 432 Mc. versions. Prototypes of both of these are working and by next month more details should be available. Anyone with suggestions for further projects is asked to write to the V.h.f. Converter Committee, P.O. Box 20, East Melbourne, 3002. Until May, 73, Cyril ZCK.

Eastern Zone, January—50 Mc.: The season started off early with some good openings to ZL, VK2, 4, 5 and once to VK6 (Nov. 19, 23, 26, 27, 28, 29, 30, Dec. 3 and 4), then quiet until Christmas (Dec. 23, 24) and opened again over New Year (Jan. 1, 2, 3 and 4). Nothing unusual happened. No VK1, 7, 8 or 9 heard, also no one logged the VK10 beacon in Gippsland. No short skip under 470 miles observed, hence no Ex opening recorded on 2 metres.

144 Mc.: Consistent good openings to VK3, 5 and 7 throughout the season. The VK5VFE beacon received strongly in the Morwell area on Dec. 8, Jan. 1 and 14. Morning of the 4th it was interesting to note that 45 minutes after the V.F. beacon faded out on 2 metres, the 6 mhz band then opened up to Adelaide/Ez wise, hence nearly two propagation modes simultaneously—extended GW and ESI. VK2ZEO and VK2ELR/2 were the only VKs seen. Action zones 20, 21 and VK2ZAT, ZC2Z, ZD2P, ZG2A, ZB2N, ZOS, ZS5—all are looking out for DX.

432 Mc.: Four or five stations are becoming interested and building gear, also we propose to have an s.s.b. group project.

February—52 Mc.: No 6 mhz openings observed in Gippsland; however the m.u.f. peaked above 34 Mc. to the north including Japan and U.S.A. on 22/1/68. VK1 also peaked up over 40 Mc. for several days between the 12th & 25th. No openings with the band around these dates over the next three months.

144 Mc.: Some good extended ground wave openings have occurred. VK2ZEO Deniliquin worked into Gippsland on 20th Feb. same night as VK2ELR, the first time extended ground free t.v. from ABSNS 8 began up to 2200 hours, not seen before or since. Sunday morning Feb. 4 we worked VK5ZLJ, SK3, SK2R, SZDR, SHP at Mt. Gambier and worked VK5ZED again on Feb. 13, 73, George VK3ZUG.

## SOUTH AUSTRALIA

Since the completion of the Ross Hull V.h.f. Memorial Contest six metre activity has been very poor. However, there have been numerous reports of JA signals heard on 50 Mc. during February, but as yet no signals have been heard or worked on 50 Mc.

Two metre activity on the other hand has been extremely high. Early in January, Mick VK5ZDL moved QTH temporarily to Tantanoola in the Mt. Barker area, approximately 15 miles north of Mt. Gambier. Mick reports that he has his 10 element long yagi firmly planted 70 feet high and running his usual 100 watts. Signals from Mick into Adelaide have been consistent and always result in 5 watts signals approaching many decibels over strength 8 on most occasions. Supplementing the activity from South East areas are John RHP, Col SK3 and Col SK2R, who have also been putting very strong signals into the Adelaide area. The most notable signal so far has been on 2 mhz for the past week. Feb. 13, when many Adelaide stations worked into the Kaniva and Yanac areas of VK3. During the same evening the South East stations were working into Mt. Barker and Mt. Lofty areas. RSP was working 24 VKCs around that area. Also on Feb. 7 Mick worked VK7ZAH both ways on 2 mhz for the first time from his new QTH, having worked previously twice from his old location.

Again an upsurge in 50 Mc. activity has occurred. An Australian record appears to have been set by John SK2Z and Graham SZ2LJ. John was located 17 miles south of Kingston and Graham at Mt. Barker in the Adelaide Hills. 16 element collinear were used at 100 watts and John SK2Z was using standard gear. Signals were RS 50 both ways. Consequently, activity is high on 50 Mc. and it would appear that this record is bound to fall in months to come.

On 2nd Feb. the annual general meeting of the V.h.f. Group of South Australia was held, and the following resolution for the ensuing year was passed: Chairman, Eric SK2ZE (elected); Vice-Chairman, Edwin SZ2W; Sec.-Treas., John SK2Z; Councillors, Barry SZ2MW, Rick SZPQ. Extensive discussion was had on topics and projects for the coming year and the committee are presently formulating a programme to follow. From all indications it appears likely that 1968 will be the greatest year ever for v.h.f. activity in VK5, 73, SZ2HJ.

## NORTHERN TERRITORY

Barry VK2KDI is running 30 watts a.m. on 52.3 Mc. to a 6 element beam. Mick VK2ZMR runs about 25 watts a.m. to a 5 element beam and is v.f.o. controlled using commercial gear, ex U.S.A., and is v.f.o. controlled and usually nets on caller's frequency.

VK5AU has s.s.b. about 45 watts p.e.p. is located at Batchelor and is surrounded by tropical jungle. His QTH looks lousy, but seems to work okay. VK2ZEB is still building his gear with assistance from VK2ZMR. Doug VK8EKK has moved from Alice Springs to Darwin and is working on his gear. VK2ZSJ, ex VK8ZSJ, ex VK5ZSJ, has 6 watts to a 5/8 whip on 6 metres and 8 watts to a 3 element beam on 2 mhz. The main activity has been JAS with a few VK4s and the Southern States. Jim VK5ZSJ, ex VK5ZSJ.

## Correspondence

Any opinion expressed under this heading is the individual opinion of the writer and does not necessarily coincide with that of the Publishers.

## AMATEUR RADIO STATION AT INTERNATIONAL CONFERENCE

Editor "A.R." Dear Sir,

The following information is provided as a news item which you might pass on to our fellow Amateurs through the medium of your Amateur Radio journal or bulletins.

In April this year the 24th Session of ECAFE (Economic Commission of Asia and the Far East) will be held in Canberra, A.C.T. This is a very important International Conference and many top government officials will be present.

Eight technicians and myself as Project Manager will be handling the complete electronic side of the Conference for the company which employs us. The electronics include simultaneous interpretation equipment, tape recording, closed circuit television coverage and radio frequency paging.

Three of the technicians including myself have Amateur operator's licences and intend

setting up an Amateur Station at the site of the Conference as a social recreation for the technical team.

The Department of External Affairs will publish the details of the Conference Bulletin so that any delegates who are Amateur operators or interested in electronics may join in the social activity.

Because of the importance of the occasion, the call of VKIEC (Economic Commission) has been issued for the three weeks of the Conference.

Operation will be z.z.b. or a.m. mainly on 20 metres. Some operation will take place on 40 and 80 metres if sufficient interest is shown by VK stations.

Although not regarded as a new country or new DX, all stations contacted will receive a QSL card showing the importance of the occasion and details of the operation.

Also we as the Amateur operators who will carry out the exercise, believe that because of the many overseas countries represented at the conference and the interest shown by the Commonwealth Department concerned, this is an opportunity too good to miss, to publicise our hobby and the international goodwill it fosters.

Please assist us by conveying this information to the Amateur fraternity by any means at your disposal.

—Dennis Wheaton, VK3AWH.

## N.Z. ELECTRONICS CONVENTION

Editor "A.R." Dear Sir,

As you may be aware another National Electronics Convention—Nelson II—is being held in Auckland this August. This convention will once again reach a high technical level and hold a major place for electronics personnel from all branches of the industry. Previous experience has shown that these conferences are attended by research workers, designers, engineers, technicians and other specialists from all branches of Government, D.S.I.R., Broadcasting, Police, Defence, Railways, Forestry, Civil Aviation, etc. as well as Hospitals, Power Boards, Universities and assorted manufacturing and industrial concerns both working in electronics and employing it in their processes.

We enclose for your information copies of the first two circulars which contain details of the conference exhibition and enrolment. We would appreciate any publicity which you can give to this conference which last time drew 450 delegates and 80 papers.

We will ensure that future circulars are sent to you and assure you that any further information can be obtained from the writer.

Thanking you in anticipation of your assistance,

—Robin H. E. Beckett,  
Publicity Officer.

## CONTEST CALENDAR

6th/7th April:	"CO" W.P.X. Phone Contest (s.s.b. only).
11th/12th May:	17th OZ-CCA Contest (c.w. only).
6th/7th July:	"Summer" Top Band Contest (R.S.G.B.).
12th/13th October:	21/22 Mc. Phone Contest (R.S.G.B.).
26th/27th October:	7 Mc. Phone Contest.
17th/18th November:	7 Mc. C.W. Contest.

## V.H.F. CONVENTION

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invite you to their

### 1968 CONVENTION AT MT. GAMBIER

### SAT., SUN. and MON., 8th, 9th and 10th JUNE, 1968

Further details in May "A.R." and in Divisional Broadcasts

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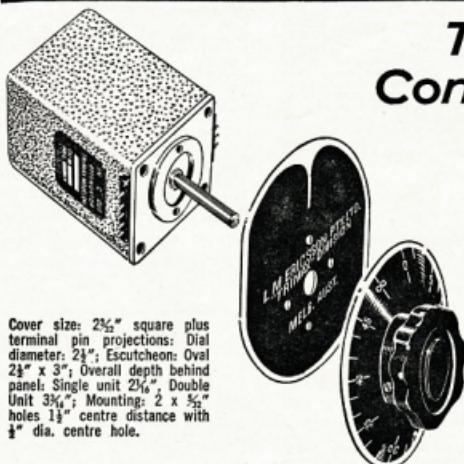
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LM50



# FEDERAL AND DIVISIONAL MONTHLY NEWS REPORTS

(SEND CORRESPONDENCE DIRECT TO DIVISIONAL REPORTER NAMED AT PARA. END)

## FEDERAL

### LICENSED AMATEURS

	Full	Limit.	Total
Following are figures for November 1967:			
VK1	74	18	92
VK2	1321	464	1725
VK3	1122	530	1652
VK4	470	184	654
VK5	490	222	712
VK6	284	131	415
VK7	132	79	211
VK8	19	6	25
VK9	64	13	77
VK0	8	0	8
Totals	3984	1567	5571

### W.I.A. POSTAL MOTION 1/67

All Divisions have indicated an A.V.E. vote to this motion. Accordingly, the W.I.A. Federal Contest Committee will be maintained by the W.I.A. for the duration of the current year, 1968-9, contrary to W.I.A. policy that this committee be maintained by each Division in tri-annual rotation.

### INCORPORATION OF THE Q'LAND DIVISION

In the Public Notices section of the Brisbane Daily Mercury, Queensland, a public notice has been inserted advertising the intention of VK4 Division to become a Company. The Divisional Secretary, Alan Simpson, indicates that their efforts to become incorporated are almost complete. This action will待 the time of adoption of the new Federal Constitution as then all Divisions will be incorporated societies and able to become members of the Federal Company.

### FEDERAL CONVENTION AGENDA

Motion sheets are being prepared and should be in the hands of Divisions early in March. Motions were received from all Divisions, and any further matters will have to be raised as General Business items as the deadline for receipt by F.E.S. has passed.

### OVERSEAS MORSE REQUIREMENTS

Following the reduction in Morse speed requirements for Australian Amateurs, it may be of interest to note conditions existing in overseas countries (Receiving Tests):

U.K.—Receiving 36 words per minute (word) in plain language in three minutes, and ten five-figure groups in 1½ minutes; more than four errors in plain language and more than two in the figures will result in failure.

U.S.A.—Examinations for General, Advanced and Extra classes of Amateur licence are conducted by an examining panel.

For all Extra class licences, except for 31 Novice, Technician and Conditional classes are conducted under F.C.C. procedures by a volunteer supervisor (holder of General class or higher licence is usual) in the field. F.C.C. certificates of passing are given by the supervisor. Examiners mostly use hand sending. The applicant is required to send and receive, at the specified speed for one minute out of a five minute test without any error.

Europe.—Countries with 12 w.p.m.: Germany, Finland, Netherlands and Norway. Sweden is 18 w.p.m., the latter with a five-minute test and a maximum of three mistakes. (It need not be pointed out that L.T.U. headquarters is in Switzerland!)

### AMATEUR OPERATION IN INDONESIA

The Minister for External Affairs, The Hon. Paul Hasluck, recently replied to a query regarding this matter. The Australian Embassy in Djakarta informed the Minister that the Indonesian Government law prohibiting Amateur Radio operation is still in force—described by the Indonesian representative of Djakarta Amateur Radio operators as "an old order law". He felt that the Indonesian Communications Council would be prepared to seek the withdrawal of the law and has undertaken to do so through the Communications Council.

A.R.L. has informed us that on 30th December, 1967, General Soeharto signed a decree authorising Amateur Radio. It is understood that in a couple of months the Indonesian Government will notify L.T.U. of its bona fide objects to Amateur Radio communications and

that the ban can be lifted. There are several "amateur" groups in Indonesia, and currently two of these are showing signs of making application to I.A.R.U. for membership. Which of these determinative outfit is at this time somewhat uncertain.

Australian Amateurs are reminded of para. 78 of the "Handbook" which would seem to preclude communication with Indonesian Amateurs until such time as the P.M.G.'s Dept. has been notified by L.T.U. that the position which has existed for some years has been formally and officially altered.

### FEDERAL QSL BUREAU

The following changes in the A.R.R.L. QSL Bureau list have been notified:—

W1—Hampden County Radio Assn., Box 216, Forest Park Station, Springfield, Mass. 01108.

W4 and W4—L. Parrish, K4HXP, RFD 5, Box 80, Hickory, N.C. 28601. (Cards for WA4, WB4 and WN4 continue to go to WA4WIP as before.)

KP4—Mrs. G. Rodriguez, KP4CL, Box 1001, San Juan, Puerto Rico, 00902.

The new QSL manager for the Canberra Radio Club, Box 1173, Canberra City, A.C.T., is Andrew Davis, VK1IDA.

Boys Town Amateur Radio Society, WA5OGI, Boys Town, Nebraska, 68010. U.S.A. advises that Father Flanagan's Boys Home celebrated its 50th year during 1967 and the Club Station issued 500 QSL cards to stations who QSLed us in 1967. However, due to poor equipment and no set operating times, very few of these cards went to DX stations. In order to give DX stations a chance to receive and receive a special card, they will operate at the following times and dates: 14370, 2400 GMT to 0600 GMT; 21405, 1900 GMT to 2130 GMT, Feb. 25, Mar. 3, 10, 17. For each QSL contact they will return one of the above cards.

Tubby Vais, VK5NO, ex VK5NO, advises that he has not kept the best health of late and the doctor has ordered him back south. This move may take a few weeks to become effective. VK5UG will continue in operation on 100 per cent. phone basis.

—Ray Jones, VK3RJ, Manager.

### FEDERAL AWARDS

#### DXCC NOTES

The following operations were listed by the A.R.R.L. during 1967 as being unacceptable for DXCC Credit. As the W.I.A. DXCC is based upon the A.R.R.L. list, no credit will be given locally.

K4MP/KC4—Navassa Is.

PY5XA—St. Peter and St. Paul's Rocks.

VK2ADY—Hearst Is.

VU2WNV—Laccadive Is.

VQ5AA/C—Chagos.

IA6SB—Bishop's Rock.

IABWNV—Blethen Reef.

An addition to the Countries List is Farquhar, Farquhar, formerly one of the Seychelles, is now one of the islands making up the British Indian Ocean Territory. Contacts made with Amateur stations on Farquhar November 18, 1965, or later, will be counted as separate from the rest of the Seychelles.

### SILENT KEYS

It is with deep regret that we record the passing of the following Amateurs:

VK2E—Bert Wright.  
VK2AGK—Alf Girling.  
VK3CD—J. Rich Phillips.  
VK3NB—A. F. Nickson.  
VK3TI—Charles Godden.

### NEW AWARDS MANAGER

The Federal Awards Manager is now Geoff Wilson, VK3JAMK, and any applications for DXCC, VHFC, WAS (VHF), or WAVKCA should be sent to him direct at:—

7 Norman Avenue,  
Frankston, Vic., 3199.

DXCC listing changes should also be forwarded to the same address.

Sufficient postage to cover return of cards must be enclosed with application.

### NEW SOUTH WALES

#### FEBRUARY MONTHLY MEETING

The meeting was held at Wireless Institute Centre on the 23rd and was opened by President-Chairman, Keith Finney, VK2KJ. After the usual formalities of reading the previous minutes new members were admitted and approved and welcomed to the W.I.A.

President Keith then gave the customary report of Council activity in which he drew attention to the renovations to the building and the re-decoration which is most impressive.

Chairman Keith "the 'marmite' master" referred to the Conventions being held over Easter and the W.I.A. to make this historic event a complete success. He went on to mention the new Hamfest to be held Regionally available from the Divisional Office, the P.M.G. and the Equipment Store. Keith concluded by saying that ALL members should have a copy and carefully read it.

Chairman Keith advised that the March meeting would be the Annual General Meeting and election of Council would take place then. The election would not be at the April meeting as announced earlier.

The March meeting would also contain the Annual Report of Council in which reference to some contentious items and current rumours would be given. A clear statement of the Council's policy would be given with recommendations for the incoming Council.

Concluding the report, Keith advised that results of sub-committee competitions and the new cards were arriving at the rate of 50 a day. By the way, have you sent yours in?

Four lectures were the evening's entertainment, the first on early Gramophones complete with reproductions of gramophones by Agar, VK2AIM; the second on Antennas by Hans Ruckert, VK2AOU, proved very interesting. The third was a description with biased slides of the team of Burtof and Molen on XYLs and their work on the 1967 World Day. The trials, tribulations and joy in such an exercise left the audience cautious of mountain operation, but no doubt interested in going mobile, portable, etc.

The final lecture was given by Sid Molen on "Getting back 93 per cent of QSL cards". Quite a humorous talk, supported by verse, no actual proof of the method doubtful in itself was presented. There will be no lecture at the March meeting, and the April lecture was not confirmed at the time of writing.

A visitor to the meeting was Al K1LWE, of Seattle, on R. & R. leave after having been wounded in Vietnam. Al told many stories of that which can only be described as incredible. Chris VK2EDD, chairman of the Gosford Club, spoke of his visit to the hospital where he was well taken care of Amateur style. Stan VK2ZRD.

### HUNTER BRANCH

In the usual true democratic fashion, the annual election of officers of the Branch was held on Friday, 1st March, when a small but enthusiastic audience was present. The Divisional President, Keith 2KJ, was there to see that no unworthy practices took place and, since the whole procedure was over in a matter of less than an hour, took to writing in he could hardly do otherwise. The Patron of course remains as Frank ZAPO, but there has been a considerable reshuffle in the other positions. The President this year is Rodney 2CFX, and it seems good to have a non-member of the executive. The retiring President, Frank 2ZFX, who did such a good job in organisation of both committees and general meetings during the year, has found it impossible to continue in the top place and has agreed to continue in the vice-presidential

position with his colleague as Bill 2XT. Both Treasurer and Secretary remain unchanged. Gordon 2ZCG and Len 2ZPF being the new members. Bill 2ZL and Zone Correspondent is again Keith 2AKX with Joe 2ZJO to assist. The v.h.f. liaison officer's post is ably filled by Mac 2ZMO while Bill 2ZW remains social secretary and Stan 2AYL is S.Q.L. manager with the same responsibilities for your ends. Two new committees have been formed to deal with broadcasts and publicity and another for activities. Activities committee members are Tony 2ZCT, John 2ZJG and Bill 2ZW, while the broadcasts and publicity there are Stan 2AYL, Keith 2AKX and associate member Neville Threlfo.

The thanks of all Branch members go to Frank and his 1967 team for a job well done and best wishes are extended to the incoming executive for a successful and interesting year 1968.

Bill 2XT reports sensational increases in signal reports since he lifted the beam (umbrella type) to the top of the 70-foot mast at Cox Point, having the best results. Allen 2KKB must have decided on some modification or additions since his aerial suffered the buffeting in the recent gales. As for Bill 2ZL, his aerial is resplendent with various hanging wires at present in the hope that he will find where it is resonant. It seems that this is the price one must pay for owning s.a.b. gear.

Probably the smallest but highest gain serial of the month is that built by Tony 2ZCT who used it for the 432 Mc. fox hunt at Gosford. It is cunningly mounted through the roof vent hole in the boat house. And to think that ordinary 80 metre dipoles are still the delight of some. Bruce Morley, our keen associate from Toronto, has constructed one just such for receiving purposes. The two glistering poles which support this fine antenna are now a familiar landmark in Toronto, as those of Jim the DX man. And as for Paddy 2AZUX, not only did he get on the air again this month, he even is talking of putting up a similar aerial, much to the delight of his many 80. The poles for the rather hush-hush design have come from the home of John 2XQ who is moving house to Hamilton.

Other than the AGM, probably the most popular event of the month has been the well known Gosford Field Day. In the opinion of some, this has had to be rivalled by any such event in Australia and certainly some of those that get a three-page spread in the R.S.G.B. Bulletin (sorry there, Communications) are not better than our local do.

Some have been complaining about the scarcity of contests on v.h.f. of late and most likely the criticism is justified, since, if it reflected as a general thing on 146, then there's nobody on! It is to be hoped that the inauguration of the new activities committee will make the difference needed to bring good contests back. Some have suffered some revision with the elimination, for a trial period, of all callbacks. However, the station signing 2AWX will be on the air 15 minutes before the broadcast with requests for reports. It is to be hoped that the events which disrupted the broadcast on the last February Monday will not recur, since these resulted in a complete absence of signal outside the shack—which wasn't a good thing.

In case you've forgotten, the Branch meetings are held on the first Friday of the month in the Club Building Room 6, at Newcastle Tech. College, Tighes Hill, and the commencement time is 8 o'clock, in the evening of course. Perhaps you'll consider coming along to the next one which is on the 1st of April or the 1st either 8th April or 3rd May. Either way, you are assured of a good night's instruction, gossip or whatever and you'll meet no end of people you haven't seen for years including that bloke who has the very same problem as yourself or even myself—in my case, money. So see you there, 73, 2AKX.

#### CENTRAL COAST RADIO CLUB

The Gosford Field Day was held on Sunday, 25th Feb. Ideal weather helped to make the day an outstanding success, with attendance of over 300.

The feature of the day was the 432 Mc. mobile for hunt, attracting a field of eight competitors. This is believed to be the first time a 432 Mc. hunt had been held and judging by the enthusiastic support, will certainly not be the last.

The following is a list of prize winners: Mobile Scramble, H.F.—1st, Les 2BZK; 2nd, Harold 2AAH; 3rd, Noel 2ASQ. V.H.F.—1st, Vic 2ZCF; 2nd, Dave 2AWZ; 3rd, Paul 2ZJF; 4th, 1M—1st, Peter 2ASZ; 2nd, Bob 2ZC; 3rd, 2ZCG; 7 Mc.—1st, Bill 2ZCV; 2nd, Dick 2ZCP; 3rd, Harold 2AAH; 144 Mc. Peter 2Fox Hunt—1st, Bob 2ASZ; 2nd, Peter (from Lawson); 3rd, Colin 2BCC. 432 Mc.—1st, Harold 2AAH; 2nd, Dave 2AWZ; 3rd, Mac 2ZIM.

## OBITUARY CHARLES GODDEN, VK3TI

Charles passed away on 1st February, 1968, aged 61 years. He had not enjoyed the best of health for the past few years, and recently retired from active work, and at the time of his death he was employed part-time at broadcast station 3MA.

Charles was first licensed in May 1937 and remained active throughout the period right up until his death.

During the war, served with the group M, The Australian Special Unit A.I.F. Wireless, and was discharged with the rank of Warrant Officer II. Returning to Mildura after discharge, he continued in the radio service business up to his retirement.

Charles was also active on and off on all bands including a short spasm on 2 metres. He also held broadcast operators certificate, proficiency and from time to time did part-time work with the local broadcasting station 3MA.

We, the Mildura Group, extend our deepest sympathy to his wife and four sons.

## EASTERN ZONE

Our Zone held their get together picnic on 4th Feb. at the Moondarra Dam, and a pleasant day was had by all. The caravans, motor homes and portable stations were set up by Stan 3ZAB, George 3ZCG and John 3AED.

The A.O.L.C.P. class got away with a good start on Feb. 19, with 18 attending, and the next week (Feb. 26) attendance increased to 22. David 3ZQZ is the first lecturer, and will be followed by Len 3ZSS, Trevor 3ZGA, George 3ZCG and others 3ZPL, with others following. This class will run each Monday evening at the Women's Aux. R.S.L. Hall, Morwell.

3ZAT is now working down in Melbourne so we are sorry to lose you, Aud, and we all wish you the best in your new career. However, looks as though we will gain a new member, John 3ZAA, from "A".  
Also, Peter 3ZWW makes frequent visits to Bairnsdale, operating mobile and from Bairnsdale on Ch. A.t.m. Barry 3ZQC, Mirboo North, over the next few or four months, will be working in the Orbost and Eldon areas. Rod 3UG (ex 3CR) is now living back in Gippsland and working at Warragul.

The Eastern Zone Convention will be held over the weekend of April 20 and 21, near Mirboo North, at the Gippsland Educational Hostel, 2 miles out along Thorpdale Road. Entry fee is \$2.00 a slooped, track down the hidden transmitter. We welcome visitors and short wave listeners. To receive further details please write to our Secretary, 3ZAB, 10 Chenhall Cres., Traralgon, or phone the President, Morwell 43963. See you all at the Convention 73, George 3ZCG.

## QUEENSLAND

### IPSWICH AND DISTRICT RADIO CLUB

Once again we must report a very active month, climaxed by the club's participation in the John Moyle Memorial Field Day. A beautiful location was chosen about 2 miles from Mt. Crosby, high and over looking Ipswich some 10 miles away, and here to provide for the local competition, transmission all bands from 3.5 Mc. to 52 Mc. were used and a great number of contacts were made for a total of some 500 points. We learnt a lot from our experience and hope to apply to our next Field Day. A humorous note at the Field Day was when a passing motorist stopped and came over to see what all the people were doing and politely asked when the land sale was to start—his comment almost started a hand sidesplitter.

The club membership is on the increase once again and we would like to extend a welcome to three new members—Ralph 4JZ, Roy 4ZRW and Max 4ZMV. We are all pleased to have you in the club chapter, another recent member to our QSL class is Allan who lives at Mt. Glorious and attends our classes each Thursday night and has a mighty long drive home after class. Hope our instructor does not keep you in after class Allan, it might be hard to explain to the XYL.

Six meets DX is coming in now and one more, Alan 4QW, is coming in on getting his share of JA's. I believe he worked 10 on his way home from work and eventually went QRT with a real pile up calling him. If this keeps up, our QSL manager Bill will be sending large batches of QSL cards to the JA Bureau.

The club house now sports a set of front steps and the like some ground cleaning done. We have not had them before and now we are planning an official opening in the near future, perhaps a set of railings will be next before the official opening to keep all the celebrating members from falling off the landing.

The long awaited get together with the Bundaberg Club was at Lake Burdekin. Over 20 club members made the trip up to the Dam. Seven cars went up, operating 6 m mobile en route, and an enjoyable time was had with the Bundaberg troops. The area about the Dam was very scenic and we had a visit from Andrew 4AT on the Sunday. The members from Bundaberg present were Roy 4ZWR and Geoff 4GI, also Bob 4UD. It appears 4ZRW was also present but no one actually had an eyeball contact with said gent.

Members of our club included Ron 4LG, Dave 4HW, John 4ZJE, George 4ZLG and yours truly 4GT, also s.w.t. Tom who slept in his car and was walking around most of the time some time on Sunday until he was able to straighten out. Activities included a fox hunt and screening of club films. We are looking forward to another outing on similar lines with the Bundaberg Club. We all missed Rusty 4JM at the get together and hope he is not



## PRESENTATION OF MERIT AWARD TO VK3ATN

Presentation of A.R.R.L. Technical Merit Award to Ray Naughton, VK3ATN. The presentation was made by Mr. E. J. Wilkinson, of the P.M.G.'s Department. Mr. E. J. Wilkinson, VK3ZS, looks on. For story see "A.R." December 1967.

missing his appendix too much and will be back on his feet again soon.

We have welcomed back an absent club member, name: Bob SXR, who will be staying with us for a short time as he takes up a new posting in VK2 in April—nice to see you back again Bob.

Well chaps, enough for this month, see you all again next month. 73, Warren 4GT.

#### CENTRAL QUEENSLAND BRANCH

Some considerable time has elapsed since the activities of the Central Queensland Branch have been chronicled in print, but endeavours will be made to ensure regular contributions of news during the forthcoming year.

The annual general meeting of the Branch was held on 16th Feb. at the Clubroom in Quay St., Rockhampton, with a splendid attendance of members. The President, Mr. F. Nolan, 4FN, delivered an excellent report on activities during the year, and mentioned many points concerning the financial position, the consistent support at social and club gatherings, and general keen interest shown by all members in Amateur Radio.

Election of officers for the ensuing 1968 year resulted in the following members being appointed as main office-bearers: President, H. Hobler, 4DO; Vice-Presidents, F. Nolan, 4FN, and R. Greenwood, 4NG; Secretary, C. Bennett, 4ZBM; Asst. Secretary, F. Roden, 4ZFR; Treasurer, G. Fox, 4PK; Publicity, L. Merrill, 4ZIM.

During the past few months, we have been fortunate in meeting and welcoming many VK visitors to Rockhampton, and I would like to mention some of them: DSBZS (Peter of Ballarat), 4QW, 4ZPF, 4ZFF, 4ZGJ, 4ZDN, 4UD and also 8AG (Arnold of Rabaul), to mention a few. Some of these gents had an impression that Rockhampton was rather quiet (radio-wise) and I am sure that they were right, so many replies that the resultant dog-pile took some sorting out! So all you visiting VKs, please note that a CQ on 53.032 (or anywhere in the band for that matter) will produce results in Rockey.

Regular participants in the VK4 Sunday morning W.I.A. hook-ups are Hal 4DO and Geoff 4FK, who keep the Rockhampton's group name to the forefront. Mention should be made about 4ZP, a new member from Victoria, a recent acquisition which is keeping him more DX than ever! And Geoff 4FK who has been seen around the village in a new car—looks like ornithology will be ousted Ham Radio! Radio! Report has it that 4SK 4ZP has just deviated all over the place, trouble troubles are now the problem—maybe sooner we'll hear him on air! It has been reported that Joe 4CL has been hospitalised for some time, but is making progress—best wishes to you from the group for return to good health.

Activities of the v.h.f. group are at the usual high level. New call signs during the year have swelled the ranks and the 6 mx band is well populated in this area. An average morning QSO session is on 53.032 for a quick QSO before departure to various "salt mines". Regular fog hunts for the mobile gents are held, and good attendances are recorded each time; driving force behind these events is Vlie 4ZLZ, who is continually able and enthusiastic to deserve special mention.

During the recent southern DX season, it was noticed that the local 6 mx gents were right "with it". Hardly an opening occurred but that the gang were there in strength—old stagers Lance 4ZAZ and 4ZP, plus one brand new to radio, Doug 4ZDK, Doug 4ZDK, Lyle 4ZLD, Gordon 4ZGA and Lyndsay 4ZLM were well to the forefront. A glance at the various log books shows the keenness of the group, with a variety of choice of call signs including 9ZAK of Morebys!

With the advent of the early openings to JA land this month (Feb.), the beams have swung north and once again the regulars are working in their practically full time. Some good openings have occurred and QSO totals are mounting—one keen character has passed the 50 mark since 10th Feb. I'm told! Considerable activity in the region down to 46 Mc. has been noted with the r.t.s. and beam signals from eastern sources—commonplace logging—at strength to R9 plus 20, quite often.

In closing this month's news, we must make mention of our country members—John 4NZ of Mount Morgan, a member of whom I know very little, is a great operator. Don 4ZBR the gent from Biloela who thinks nothing of driving 90 miles each way to attend club meetings. Don rejoices in an 80 ft. tower plus yagi beam on the mx and judging by his JA QSO tally, will raise the bar even higher.

And a final word to any visiting Amateur. C.Q.B. members would like to meet you, call CQ on 53.032 or use the 699 ohm system to an office-bearer—you will be made welcome. That's the lot for the moment. Is, Lyndsay 4ZLM.

#### TOWNSVILLE AND DISTRICT

Although this will appear in the April notes, please do not think it is the usual joke as no notes have been sent for the last three months. The reason is that the writer has been away once again on his usual vacation to the southern climes, as the XYL says, to beat the heat in Sunny Nth. Qld. What a joke that was. With the sweltering heat I experienced in Victoria and South Australia!

This time I forgot to take along the call book and was unable to ring the chaps as usual. So I had to depend on Tom, Old Harry, etc. I did try to remember the initials of the famous scribe from South Australia, but there were too many PARSONS in the phone book, so offer my humble apologies.

In the local press there was quite an article on "Great Radio Broadcasts" which only made the headlines rise as the poor old Amateur came in for all the blame. As we really know that the Amateur in the U.S.S.R. really has an extra stiff exam, to pass and seems proud of his record, the result of which would not be operating outside his own bands.

What with the postal trouble in sending mail, I was unable to let the boys in Sydney know of my arrival and missed out in seeing them. On my return to the Sunny North, I found that old Sol had covered his face and was wearing a heavy raincoat that there were floods everywhere and over 50 inches of water was recorded in ever so many days, wettest for 90 years. The southern climes are still in the throes of drought (Feb. 27) at the time of writing, and that there heat beats all past records.

The local club got away to a fine start in this new year with many promises to try and get the local club building under way. The boys from the northern states had nearly a break through to K3H or ZL boys. DX is appearing for the others in the 14, 21 Mc. bands although I find it hard to hear any on 20 Mc. I have tried to get the northern boys did not evensure because of the flooded nature of the highways, so see you boys perhaps in the Tourist Season. 73, Bob 4RW.

— \* —

#### SOUTH AUSTRALIA

The February meeting of the VK5 Division, which was a joint Annual General Meeting and a Monthly General Meeting, had to be a very good roll-up of members and visitors, a very good sign of their enthusiasm because this type of monthly meeting has very little to attract a good attendance, although for some reason or other the monthly general meeting has been noted for a good roll-up. Very little can be written about this type of meeting except to say that a lot of questions were asked and answered, a few grievances were aired and a few new members were brought aboard, much to everybody's satisfaction.

Whilst on the subject of annual general meetings, there was a good attendance of members at the VHF AGM, 36 to be exact, and the President for the coming year, Eric SZEE, and the Secretary, Joe 4SQZ, must have been pleased with the opening of the new administrative year.

It was surprising the number of members at the Divisional meeting who queried the absence of any Divisional notes in the first issue of "A.R.C." for the year. I can't say for more years than I care to remember, this issue of the magazine has never carried Divisional notes, due I think to the fact that the printers take their holidays in January and the magazine then has to be printed and the next issue of notes are possible. Anyway, it is good to see that the notes were missed, apparently we have a few readers here and there.

Heard on the grapevine that Russ TRM will be returning to the States after a winter period, and no doubt will renew many old friendships, and no doubt note the many gaps in our ranks since he was a member of the Division.

A number of VK5 associate members, who are keen s.w.l.'s, are not very happy at the moment with why they have to leave the membership in the W.I.A. The question of what to do for the s.w.l. member of the W.I.A. has always been hard to answer, most s.w.l. members join the W.I.A. and eventually become licensed, but the confirmed s.w.l. becomes a difficult proposition. It is suggested to provide him an outlet for his hobby, which after all is just as important to him as any other section of the Division. Several times some enthusiasts have approached me to form an S.W.L. Group but after a while the enthusiasm has faded and everything settles back into the doldrums. Being small in number, the s.w.l. undoubtedly has a genuine grumble on number of matters, most of which never get heard because of the said small numbers.

Talking of s.w.l.'s, I notice that Ernie Lau, VK5-L2245, recently received an Honorary Saskatoon Award from Canada, and he claims this is the only one in the world to receive it. Incidentally, if anybody is interested in doing anything for the s.w.l. within the Division, have a chat with him as to just how much the s.w.l. gets out of membership in the W.I.A., plus a few grizzles on the lack of awards available to us.

By the way, if perhaps any reader of these notes feels at times that the world is against him or that he is getting a raw deal from life, I would suggest that he take time out to read the story of "The Amazing WHALEY" in the May issue of "G.S.T." (page 57). Described of three important senses—sight, speech and hearing, he passed the F.C.C. exam at the age of 23 years, and his story should be an inspiration to us all to stop grumbling, get to work and move ahead.

The first meeting of the associate members of the VK5 Division for 1968 was quite a success and saw volumes for the work put in by the committee. Wayne 4ZP, in view of the fact that it was close to the approaching P.M.G. examination, the main item for the night was "The Amateur Radio Operator's Certificate" and members were able to ask and answer on this subject. John SUL and Geoff STY answered the questions to everybody's satisfaction, and all in all the meeting was a huge success.

Harry 5MY, our close-fisted Treasurer, is at the moment working on the high seas en route to Page, Pa. From the account he is having the time of his life. This area is no stranger to Harry and the XYL, if my memory serves me right, their last vacation was taken either here or Suva. What is to be in the storehouse?

Son of Geoff STY was recently accepted as a junior associate. This is a good idea to increase the membership of the Division, but just what does Geoff think of the QRM growing up within the four walls of the house? Instead he is too busy with W.I.A. matters to care.

Col 5CY, from Balranald, was sighted in the city on holidays recently, and if rumour is correct, he has joined the ranks of the idle rich. He will be more or less knocking off to cast bricks, because he will be playing around with radio equipment instead of working on radio, etc., as a vocation.

Brian SBI is reported on the re-building racket once again. This joker never seems to stay still for a minute and will start re-building at the drop of a hat. No news of the Admiral lately Brian?

VK5 has never had a YL operator for very long periods, the only one I remember was Betty Geisler from Murray Bridge, and I don't think she is still active. I have heard of her 1st Class Commercial. Anyway, if all is to be believed, it won't be long before this position is remedied as my spies tell me that Lorraine East, from Mallala, is a keen addict at the radio hobby and will one day grace the s.w.l. ranks to sit for the ticket. Good work, Lorraine, you will never regret the effort.

Max SOF not very active these summer days, has however taken some pleasure in getting to that of the art of yachting, an art at which I am led to believe he excels. If he cares to take me for a sail any time I will be only too pleased to stand on the front and signal every time we turn round the corner.

Talking of sailing, should tworepid adventurers Carl 5SS and Frank 5MZ, have wound up to Murray Bridge and boarded the paddle steamer Avoca and sailed all the way to Falleen Bend, and in one afternoon at that! The occasion was the picnics organised by a section of the Electrical Trade of S.A. (E.T.S.A.) to you and a good time was had by all, with plenty of cups of tea with the famous Murray water, and a potent brew it certainly was, with an aroma that could be heard and smelt for miles around. The day, the 2nd, saw the followers in bed with a septic throat on the following week and whilst no nasturtiums will be made, Carl is at the moment right off tea, with or without the famous Murray water.

Alan 5AN was another daredevil on board the Avoca who snatched a sleep or two of the famous brew that late at night. He has been heard on 7 Mc. of late with quite a strong signal at my QTH.

Occasionally one bumps into a couple of the boys who live in close proximity to each other and are quite friendly, but not necessarily so friendly as to their air time. Then again there will be three or more in the same boat and they all work in perfect harmony as to their air time as evidenced by Ken SHM. This fellow has a skip with a crew of rats and in VK2 around 5-6 p.m. and ends rain or shine, always manages to sign off at the right time to permit another well known skip in the area to start on time. This is the spirit that makes for good relations in our hobby.

I notice that Allen SFD is now the State Secretary of the VK5 Youth Radio Scheme following the State Convention held at Elizabeth on the holiday week-end of January. A similar convention has been arranged to be held in July, featuring the National Convention to be held in VK5.

Uncle Tom STL was sleeping the sleep of the pure and innocent the other early morning when the telephone disturbed his slumber. When he answered, the call was from the police to inform him that a window had been found open at the Glenelg Post Office and they would like him to rendezvous with them and check the premises. Tom, at the unearthly hour of 1:30 a.m., sallied out to Glenelg with his service made a thorough check of the premises, returning empty handed at about 2:30 a.m., much to his XYL's disgust at the disturbed night's sleep. He reacted in a somewhat comical manner, exclaiming "so what? I have a listen on the receiver upon his return from the post office. No dedication, that's the trouble!"

My little paragraph last month regarding the credit given to the name of Geoff STY must have inspired his Man Friday because the same magic word appeared at a later date alongside the name of Treva SZIS. I also noted the name of Uncle Tom STL in the pass list, and when one compares the ages, this is as good as proof of it.

Notice that the W.I.C.E.N. Group are holding a Scavenger Hunt instead of the usual Fox Hunt this month—nothing like variety they say. I suppose if I want to find out just what the difference I will have to attend, but I don't. The word scavenger seems too close to home!

Jack SLR has at last completely settled in at the new QTH at Victoria Park and applied the bright coat of paint on the front door this week. The last six to eight months have been very busy months for him, and also the XYL, Flo, and they are both entitled to sit back and take pride in their efforts. They have built more than a little with a piece of wire dangling on the nearby fence; worked a little DX at that, but will now have more time to concentrate on the bands.

Had a good time during the Xmas season from Jim AD who still sailing the seven seas as a radio op., and sounds as happy as a lark in the process. He sends his 73 to those who may still remember him and hopes the VK5 Diaries will be strong ever.

Noticed Johnny STY getting a mention in the R.E.G.B. Bulletin recently for his work on the "top band", and the list of contacts were certainly impressive, especially as his contact with VQSCCR of Rodriguez Island, gave him his 160 m. W.E., certainly the first

known one by a VK, and congratulations are in order.

Uncle Tom STL recently had just completed a contact with a VK2 on c.w. when Freddie SFT called him and asked him to go up the telephone line of orders. No idea why the service was restored, but Freddie had been spending a lot of time washing up following the announcement of his daughter's engagement, and the subsequent break-up of course. Sounds like the telephone must have run hot, but anyway Freddie reckons that c.w. is still the best after all, as he had to use it to get his phone working!

John SYA is off on a 3-year trip to Nauru in the near future and it was announced at the meeting that he was keen to borrow a transmitter, etc., for the period, in order to keep in touch with home sweet home.

I notice that the winner of the W.I.C.E.N. scavenger hunt mentioned in my last home other than John 1DZDZ/S who apparently was home for a period. Barry SZMW was second, and equal third were Phil SNN and Murray SZAR. Quite a good roll-up and although more work will be required into the future, the hunt than is required for a fox hunt, it would seem that the change was appreciated by all.

Incidentally, the young son of Geoff STY christened Murray, and now a junior associate member, was well to the fore at the hunt, and with Tom STL in the driving seat, probably formed the youngest and oldest operational crew.

Bob SZDX and Treva SZIS were recently put on to some maintenance work due to a strike where they work. Imagining their feelings when half way through the said maintenance, to find the strike called off, but no chance of start for the next few weeks, it would be to think that the maintenance was hustled along a little.

Well, this month has been a bad month for news gathering, in fact I never remember it so bad, scattered on all bands, but very little activity in the 160 m. band, and a definite inclination to go into the shack. Here's hoping next month will be better—if not I will be out of business—and VK4 and VKS, plus YEd, will be overjoyed! 73, de 5PS—PanSy to you.

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## WESTERN AUSTRALIA

It is pleasing to be able to report that the attendance at our meetings each month has maintained the general trend, and a couple of meetings have been well attended. The last couple of meetings have strained the seating capacity to the utmost. Seems as though the present time and place is convenient for most members, and judging by the extremely poor representation by country members, the location must be in the local Bulletin, a change is not indicated at present.

Remember the disposal sale way back at the January meeting? Well, one of the items auctioned off was a thirty-foot tower complete with base. This was bought by a visiting amateur to our sunny shore who was due to depart the aforementioned shores within several days. For some strange reason, shipping and airline companies tend to look askance at passengers taking thirty-foot towers and their personal belongings. Hence our friend reluctantly stepped aboard the transport without so much as the co-ex. concealed on his person. To make a long story even longer, David kindly did his best to pack it back to the original state! The answer is where we came in isn't it? However, it was decided by those present at the February meeting that tower and beam be removed from its present site at Baywaters and be re-erected at Sunset Home, where it is to be used by Amateur Radio has been awakened in a number of patients at the Home, due almost entirely to Bill EYW and his small band of helpers. There have been two demonstrations of Amateur Radio in each room, each participant encouraged by lack of an omnidirectional antenna. It is hoped that with a little bit of encouragement and instruction, there will soon be another station on the air from VK5.

News has hand indicated that Tom 6TR has little time for a home for a v.h.f. beacon to be set up at Mt Barker. Things are really getting under way down South. Jack EWB and John 6GB have been noted doing their bit toward keeping the 80 metre beam "alive".

Heard an unusual sound on 40 the other Sunday morning. Turned out to be Bob 6BT. When challenged about the unusually large amount of carrier and the extra sideband, Bob nonchalantly admitted that he was "on" "frequency modulation" his sideband rig having "blown up". However this sad state of affairs has its brighter side because Bob intends to build a new rig amid the ruins of the old, so to speak. Experiments at the salt mine may disrupt Bob's appearance on the band for some little time.

What do you think of the new Handbook? One thing is for sure, its bright cover is certainly more attractive than the sombre grey of its predecessor. Makes quite interesting reading, too, particularly when compared with the improvements made to the Handbook in the last few months in "A.R.". The new Morse requirements seem to have stirred up a good deal of activity in some quarters.

Don't forget to book in for the Kalganetic Hamfest on the long weekend early in June. It promises to be bigger and better than the last one. From then on its over to you Narrogin X-group. 73, Ross 6DA.

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